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Thirty Years at Institute Work

No story of institute experience would be complete without a chapter on hotels, and while those of 1913 are better, on an average, than those of 1882, there are poor ones yet. Let no one think that the writer has a prejudice against the hotels in any special locality, north, south, east or west, for good, bad and indifferent exist everywhere.

In spite of laws prohibiting long roller towels we still find them in use by the stable man, the engineer from the saw mill and all the regular boarders who pay \$3.50 per week, while the "commercial," who pays \$2 per day, has to use them too. We have paid \$2 per day at hotels where the office

bed, and when I asked for another the landlady said, "Why, we always put on one sheet and one blanket, and leave the blanket on all winter."

We have found hotels where the food served was so plainly dirty that we concluded that our only safety was in boiled eggs, and on two eggs and some crackers I have made more than one meal. One time I was hung up at a southern town from Saturday until Sunday 4 p. m. on account of trains. The other victim was a book agent, and as we could not eat the scanty, dirty cookery, we bought sardines, crackers, etc., at the little grocery, and made two meals on them.

Once in Nebraska a dining room was as cold as a barn, and our lady,

out. One minute it was Hiawatha, another, Redwing, then Has Anybody Seen Kelly? and I am wondering what 1913 will bring forth.

But all hotels are not bad and in every state I have been I have found elegant places.

One at Crocher and another at Richland, Mo., Mrs. Westcotts at Orleans, Nebraska, "Dad" Baldwin's at Exeter, Neb., and best of all, a little private home at Pittsboro, Miss., a county seat town, miles and miles from a railroad.

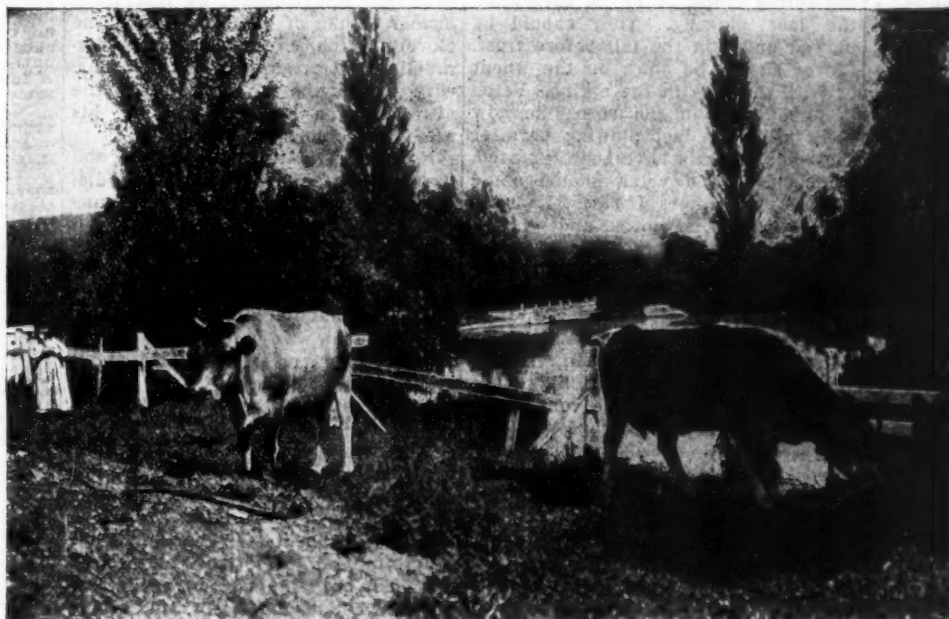
Dr. Hutchinson and I got there at dinner time on Sunday, and when we asked for our bill Monday after breakfast the landlady, who was by far the best cook I ever saw in the south, asked if we "thought 30 cents a meal

landlady was drying her stockings on the cook stove rack, and her "long green" smoking tobacco in the oven. Sam, that was one of the boiled egg places.
C. D. LYON.

SOIL SURVEY OF CASS COUNTY, MO.

The field work of the Soil Survey of Cass County, Missouri, made by experts of the Bureau of Soils, U. S. Department of Agriculture, in co-operation with the University of Missouri Agricultural Experiment Station, has been completed. The County contains about 712 square miles, or 456,680 acres.

The survey was made by the Bu-



A MISSOURI FARM SCENE.

room of 12x15 feet was the haven for all the loafers in town, with several big dogs under the tables, and where even lady guests had no other place to sit and had to inhale the fumes of half a dozen dirty pipes. As three of us, one a lady, registered at a western hotel, the clerk asked, "boarder or commercial table?" As spokesman I told him to "give us the best in the shop and put it in the bill," and all the difference in fare between our table and the one at \$3.50 per week, was one small banana each per meal. We paid \$2 per day, and always had to wait until the regular boarders were served before our wants were supplied.

One hotel had but one sheet to the

domestic science lecturer, asked to have her plate warmed. The old pirate who ran the place had the plates warmed, and brought them back with the remark, "I have been hotellin' for fifteen year, and it is the first time I ever warmed plates."

Another landlord thought it strange that anyone wanted a window open in winter, but as Miss S. insisted on his opening one in her room he got the poker, saying, "One blank blank fool wanting a big fire, and a blank woman wanting a window out; it's enough to set a man crazy."

The man who puts up at hotels gets the benefit of the new popular songs, as the boy who builds the fire at 5 p. m. always whistles the latest thing

and 25 cents a bed too much."

The Doctor told her that we had instructions to not pay less than 50 cents for such meals and beds as we had been having, and that he would set the price.

As a rule Ohio large towns have good hotels, but some of our towns have very poor ones, while west we find rather better hotels in the smaller towns than in the larger ones, but there are exceptions.

Instead of making application for hotel license, a good many intending landlords and landladies ought to apply for license to spoil good grub in the interest of the Food Trust.

If Sam Jordan sees this, he may remember the place where the 75-year-old

bureau of Soils in order that the agricultural value of the soils of the County might be determined and show to what crops each type is best adapted, in order that the Department may recommend what agricultural methods should be practiced to obtain the best possible yields, and, at the same time, maintain or increase the present fertility of the soil.

Accompanying the report will be a soil and topographic map, showing in colors, the location and extent of the various types of soil encountered during the survey, as well as the location of all farm houses, churches, schools, public roads, streams, and railroads in the County of Cass.

Horticulture

FRUIT NOTES.

By Jacob Faith.

Editor RURAL WORLD: I promised some of your subscribers answers to the following questions:

The best time to trim trees, apples, pears, cherries and plum trees is during winter, when wood is not frozen. For peach trees wait until they bloom, then it can be seen how much trimming and thinning they need. Don't forget to cut off or shorten long limbs. Peach trees require more pruning than any trees I know of, and it won't injure peach trees to trim when sap starts in spring like other fruit trees. Cherry trees need less pruning than any other fruit trees.

Grape vines should be trimmed when not frozen, before sap starts in spring, blackberry and red raspberry canes the same, but blackcap raspberries trim in spring as soon as they leaf out.

Strawberry beds that have weeds and crab grass to shade the plants and keep the berries clean need nothing until the berries are picked. But those clear of weeds and grass, need mulching half to one inch to keep the freezing and thawing heaving the plants and lessening the crop, also keeping the berries clean.

Young trees are much benefitted by having a few shovels of dirt banked around the bodies, manure, better; which must be leveled down in early spring to answer for the first cultivation, by this method I have planted many trees during winter when ground was not frozen seldom a tree failed to grow. I don't see many rabbits, but if snow, wash trees with a lime and crude carbolic acid wash, or stick old weeds around the trees. Farmers are discouraged planting fruit trees after this two years' extreme drouth and cold, peach buds killed two winters, apples one winter, and the last summer trees too full and no rain at the time apples needed rain. My opinion is that fruit trees and berry vines now will pay. On some farms are spots to rocky and some side hills, to cultivate corn which would bring big profits if planted in peach trees, cherry and pear trees, dig around the trees a space two to three feet, two or more years is all they need. I have dug around from five to seventy-five trees a day.

A neighbor bought strawberry plants from me to raise for family use, but sold most of them not letting his children have all they wanted to eat. Many spots close by that grow up in weeds could be planted in strawberries and yield a big crop, making spending money for children.

GROWING SWEET POTATOES FOR THE MARKET.

By Roy C. Bishop.

The rapidly rising popularity of the sweet potato as a food-stuff, through the United States, and the climatic and soil limitations on its production has given the owners of soils adapted to the production of this crop the possibility of large and attractive yields and profits.

The average crop of sweet potatoes produced on well adapted soil and with proper cultivation is 250 to 300 bushels per acre. The average price per bushel varies from 50c to \$1 and \$1.25. The average cost of producing one acre is about \$50. This includes rent on land, cost of plants, fertilizer, harvesting and marketing. A yield of 250 bushels, therefore, at 50c per bushel would gross \$125, and net \$75 per acre. Of course bad years must be expected when, partial failures or even total failures may occur, just as

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is the case with other crops, and when low and unprofitable prices must be accepted. For the entire year of 1912, sweet potatoes have retailed at 5 cents per pound in Chicago; substantially the same prices were commanded in Cincinnati, St. Louis and Kansas City during this time. If the grower got his share out of this big price, he certainly received \$1 to \$1.25 per bushel for his sweet potatoes.

The Southeastern half of two-thirds of Missouri, including a narrow strip the entire length of the State along the Mississippi River, is well adapted to the commercial production of sweet potatoes. Sweet potatoes, however, may be grown successfully in any part of the State.

Sweet potatoes grow best on moderately fertile sandy loam, which is not excessively rich in organic matter, but while rich sandy soils are the best for this crop, good results are gotten on loam or clay loam soils too poor for the production of ordinary field crops. Good drainage is essential. Often the plants are set on a ridge to gain better drainage. Loose bottom soils or soils which are very deep and without sub-soils, are not good. Long poorly shaped potatoes may be produced on these soils. The best size and shaped potatoes are grown on soils which have well drained clay sub-soils.

Barn manure or green manure should be turned under on sandy soils. This will enable them to better retain moistures, increase the nitrogen supply and bind the loose soil firmly together. Cow peas, vetch and clover are some of the best manure crops. If the soil is a clay loam and inclined to be compact, the same treatment should be given. This will loosen and enrich the soil, increase its water holding capacity and enable the potato to fill out smoother and better.

Cow peas be sown after early maturing spring crops, or in the corn after the last plowing. They should be plowed under in the fall before frost. Clover should be sown on the wheat or with the oats in the spring. Vetch may be sown in the corn like cow peas, after the last plowing or after the wheat or oats have been removed. Both clover and vetch should stand through the winter. If barn manure is used, it should be plowed under in the spring or fall before. Well rotted manure may be applied as a top dressing just before ordering the ground.

The sweet potato, like the Irish potato, requires large quantities of potash and for this reason, marked increased yields are gotten by supplying this element in some commercial form. Many of the best growers use three to four hundred pounds of acid phosphate or bone meal and potash, and get good paying results from the same. A good fertilizer for sweet potatoes, where green manure is employed, would run about 7 per cent of phosphoric acid and 10 per cent of potash.

Where sweet potatoes are grown for the market, the grower should make his own hot-bed for producing the plants. The cultivation should be frequent and thorough so as to conserve moisture and destroy weeds. The sweet potato uses a large quantity of water, and therefore adequate moisture supply is exceedingly important.

Often the local market in Missouri is large and whole crops are disposed of on these markets at much higher prices than can be gotten on the larger markets. Marketing to advantage is very important, and the grower should get acquainted with the best and most reliable buyers and markets.

"There ain't going to be no core" is now a reality as Frank Rodgers, a fruit grower in Delaware, has accomplished through experiments to produce an apple seedless and coreless and highly flavored.

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THE LEGUMES AND INOCULATION

By William Galloway.

It is said that in Germany, where the inoculation of legumes was first practiced scientifically, no intelligent farmer thinks of planting alfalfa, the clovers, vetch, soy beans, lupins, serradella, field or garden peas or beans, without applying a pure culture of the nitrogen-gathering bacteria to his seeds just before sowing them.

Nobbe and Hiltner, two famous soil bacteriologists of Germany, first discovered a way to prepare these legume bacteria for the market. They put their product up in a culture-medium, or food, which preserves them for many months—much the same way that yeast manufacturers put up yeast. This product was patented in all the civilized countries of the world, and a trade name, "Nitragin," was at the same time registered in all these countries.

"Nitragin" is well known among agricultural scientists, the world over. It has been on the European markets for many years, and on the American markets for about four years.

It is next to impossible to start alfalfa, soy beans, lupins, serradella, and some other legumes, on soil where they have not previously grown, without artificial inoculation. And those who have carefully tested all methods appear to prefer the pure culture to the soil-transfer process. The latter carries with it the danger of transmitting plant diseases and noxious weed seeds.

If, as many German farmers appear to believe, the legume bacteria deteriorate from year to year in the soil, there seems to be good business reason for inoculating legume seed at every planting. It is said that with the supply of the lime kept up in the soil, fresh inoculation each seeding time increases the growth of the plants and adds protein to an extent that pays a profit on the cost of the pure culture of bacteria.

I am informed that the practice of pure culture inoculation has grown in this country until it is almost universal. A movement is now on foot to induce the farmers in Iowa to plant a million acres of alfalfa, within the

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SEED CORN. Reid's Yellow Dent shelled and graded guaranteed to grow, \$1.50 per bushel. Timothy seed \$2.75 per bushel. John McDaniel, R. R. No. 6, Box 41, Memphis, Tenn.

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next few years. Illinois, Missouri, and several other states are also preparing for a similar acreage. This will be much easier to accomplish now, with practical, guaranteed pure culture alfalfa bacteria so readily obtainable. Pure cultures are also prepared for each of the thirty or more legumes grown in this country.

NEW BOOKS.

Uncle Sam has recently passed favorably upon the availability for the crews' libraries of his fleets of the excellent South American books as follows: Winter's "Chile and Her People of Today," Winter's "Mexico and Her People of Today" (recently issued in a new revised edition up to date) and Lindsay's authoritative work dealing with Panama and the Canal Day (also recently revised to date) as well as Charles Livingston Bull's "Under the Roof of the Jungle," published by Messrs. L. C. Page Company, Boston.

Jacob Fisher's compelling novel of life on an uninhabited South Pacific Island, "The Cradle of the Deep," published by the same firm, has also been added to the navy's libraries for the jackie's entertainment.

The Poultry Yard

CHICKEN EXPERIENCE FOR 1912

Editor RURAL WORLD: I have not written many articles for the agricultural press, so I will call this "chicken experience" for 1912. I started the year with 60 hens, 18 full Buff Orpington, 22 full blooded Brown Leghorns, and 20 cross-breeds, or Mongrels, and had the full 60 during January and February; in March, 56; April, 50; May, 49; June and July, 48; August, 47; Sept, 45; October, 43; November, 47, and by December pullets had begun to lay till I again had 60.

I lost a few hens from accidents and disease, and killed for the table some fat hens that had out-lived their usefulness.

I got during the year of 1912, 6,250 eggs, or 520 dozen and 10. I sold 398 dozen and 8 on the local market at from 10 cents to 30 cents per dozen, or a total of \$76.30, and used for home use and setting, 122 dozen and 2.

I sold at one time 12 frying-size chicks for 33-1-3 cents each and several other miscellaneous sales which I have not hunted up.

I raise poultry only as a side line. I build the poultry houses, fix brood coops and my wife does the most of the feeding and watering.

I am a great admirer of full blood poultry of whatever breed kept, but in this neighborhood fully 75 per cent prefer scrubs.

This section of Arkansas is timbered country and hawks are plentiful and are the worst enemy we have to contend with.

I could write considerable on an article entitled, "enemies of the poultry yard," as we have about six of them, and I have been pretty successful in fighting them. Yours respectfully, C. G. RITTER.

Judsonia, Ark., Jan. 14.

KINDNESS IN POULTRY YARDS.

I have read so many poultry articles about the "happy hens" being the best layers, but the writers always fail to say how we should make them happy, other than by good feeding. Feeding will naturally make any fowl, animal or human being, happy to a degree of being filled, but why should we stop when we can make them still happier by our company. Why not talk to these "happy hens" every time you can catch them on the nests? See how soon they will begin to "talk back" in their own hen language.

After scattering the grain about in the litter, just commence to talk to them collectively or individually, getting hold of them with your hands, and in a very short time you will have some pets jumping all over you, trying to eat from your hand and talking to you as hard as they can. You will shortly have the whole flock chattering away as long as you are with them, and they will probably keep it up after you have gone. It was one of the most interesting pastimes to me, to say nothing of the pleasures it afforded, when I began last summer to talk to my poultry every time I went to the hen house. When the hens were on their nests, I put my face down near to them and began talking, asking questions and a whole lot of foolish talk. Sometimes I would stroke their heads with my finger tips and they would talk back all the harder. At first some were afraid, but I kept on with my "visiting" and soon they were talking like the others.

I often took my friends out to the house to listen to my hens talk, for they learned to begin their chatterings as soon as I came in sight. No matter how wild a hen is, she can be won over in a short time by the talking and patting. I really believe this sort of kindness and treatment helped to make a good per cent of my hens lay the last year. Out of eighteen fine

White Orpington hens we got sixteen eggs per day for about three months. We have the Crystal White Orpingtons. We allowed our year and a half baby to go into the lots to feed our chickens until they got too sociable for him. They would eat from his hand, but we feared for a finger or an eye, and so we had to spoil the baby's pleasure. If they see or hear the baby's voice they come in a hurry and such a talking and jabbering.

It is strange how quickly one can teach poultry, pigs, calves, etc., to come at a certain call. We whistle to ours as we would to the dog. With three or four sounds I can bring my flock to me. The past winter I have not had as good success with keeping the hens laying and I actually believe it was because I was too busy to properly feed and care for my flock. —H. L. Van Cleave, in Farmer's Guide.

THE INCUBATOR ON THE FARM

No modern farm appliance has gained a greater popularity than the incubator. While the artificial hatching of fowls has been practiced from prehistoric times in both Egypt and China, modern incubation is almost a matter of yesterday. For nearly 200 years scientists have been interested in artificial incubation, but it remained for American inventive genius to put it on a practical basis. The earlier American incubator inventors worked rather blindly, digging out knowledge empirically, until now the incubator has made a place for itself as one of the necessary appliances for the successful production of young fowls, especially chickens and ducks, and it will not be long until incubators will be as common in farm equipment as machines with which to mow or to sew, says the Breeders' Gazette.

Several years ago an incubator manufacturer said that if he could make incubators "fool proof" he could sell them by the thousand. This is the kind that is now offered the public. The modern incubator is so constructed that beginners frequently make as good hatching records as the most expert. The incubator is economical because it brings forth a large number of chicks at one time, each having an equal chance to grow. It enables chicks to be hatched early in the season so the pullets will get into laying form early in the fall. It saves time, labor and temper, as it is always ready to work and never stops as long as the lamp has oil. The incubator is to the poultry industry what the reaper has been to grain growing in that it makes possible a larger production with less help. Once it was not safe to trust to luck in buying an incubator. Now the principles of artificial incubation are well understood and incubators have become standardized to such a degree that no manufacturer offers a machine that will not give satisfaction under average conditions. The poultry keeper without an incubator is becoming the exception rather than the rule.

EXPERIMENTS IN FEEDING YOUNG CHICKS.

A series of experiments conducted by the Pennsylvania Experiment Station to determine the relative growth of different breeds of chicks kept under similar conditions resulted in the following general conclusions which may be of interest to our readers:

First, that early hatched chicks grow faster than late hatched ones, April 1 being about the most desirable date for hatching in this latitude in an average season. Second, that chicks forced from the beginning do not make so rapid a growth as those fed a moderate ration till within three weeks of market age, when the forcing process should be begun in order to have an even distribution of flesh over the frame. Third, that the larger breeds eat more than the smaller

ones during the growing period and also make larger gains daily.

The amount of food necessary to produce a pound of gain increases as the age of the chick increases; therefore it is deemed best to get the chicks on the market at an early age. Between the ages of 6 and 13 weeks was found to be the most profitable age to feed for market. Every week in the spring sees a decline in the market price, while every week added to the chick's age makes his gain more expensive. Where large amounts of feed are picked up from the range by the growing chicks, the cost of building the frame will be less than where chicks are raised on food purchased on the market.

Chicks weighing less than 1 pound seemed to gain faster on wet mash, while those weighing over a pound did better on dry mash. Chicks reared on dry grain and forced on wet mash seemed to do best of all. The losses were greater from those kept on wet mash of all size and ages.

Care should be taken not to overfeed during the first few days. On the other hand, one should gradually increase the food from day to day as the birds begin to make use of a heavier ration. Three or four feeds a day should be given, or just as much as they will eat up clean.

The chicks not to be marketed should be turned out on range as soon as they are separated from the market birds; they should there be kept on a hopped ration. Nothing is gained by stinting young chicks, and they do not like the fine-cut meals in the hoppers well enough to overfatten themselves where plenty of grass and bugs are to be had. Plenty of water is a necessity.

Green bone is very rich in phosphate of lime.

Overgrown fowls are no better in any particular than those of normal size, had better be devoted to the development of laying qualities and table quality instead of quantity.

The first eggs of the brown-egg layers are generally of a good color, but as the hen increases her laying she decreases the amount of color, owing to the gradual loss of the pigment which colors the eggs.

For strong fertility, there should be a change of male birds once a week for a male continued in the flock throughout the entire season is apt to have his favorite hens ignoring the others. By alternating males there is no chance for favoritism.

It is no easier to keep poultry than any other stock, as labor and proper management must be used to meet success. Less capital may be required with the poultry, but it must be judiciously expended, or a loss can result as easily as from any other source. Experience is of more value than capital in poultry raising.

The food left over on the ground ferments and decomposes in a very short time on a warm day, and it therefore becomes one of the main sources of gapes in chickens and cholera. Filth in the summer months should never be allowed. It is well to do away with the feed trough entirely, feeding only whole grains and scattering the food as much as possible.

Finely chopped or crushed turnips make an excellent change of diet for poultry during the winter. The same things is true of pumpkins. A pumpkin cut in halves and placed before the fowls will soon be nothing but rind. A good way is to stick them on nails in the walls of the house, as the fowls will get desirable exercise in jumping a few inches to reach them.



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We duplicate all infertile eggs. White and Columbian Wyandottes, Single Comb White Leghorns, and Light Brahmas. We use trap nests. In business for 30 years. Brahma eggs, \$3 for 15; \$5 for 30. The other varieties, \$2 for 15, \$5 for 30, \$10 for 100. Address, Michael K. Boyer, Box Z, Hammon, New Jersey.

43 VARIETIES

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The Apiary

GET A START WITH BEES.

Five or six swarms of bees will yield a net profit of \$10 or \$15 a season besides giving a family all the honey it cares to use. Bees require very little care. Anyone in the country or in a small town should keep from two to ten hives. More than ten will either take too much time and attention or they will be neglected.

Hives may be purchased, "knocked down," for \$1.50, built and painted, for \$2.50. A swarm of good Italian bees costs \$1. It does not require much capital to start out in the bee business on a small scale. And then, the bees will pay back the cost of the original outlay in the first section of honey. In a good year there should be from two to four sections filled with honey.

Alfalfa Honey's Fine.

Kansas might be the greatest bee state in the Union, according to T. J. Headlee, professor of entomology at the Kansas Agricultural College. It is a great, big field of plants from which bees get their nectar. Alfalfa honey is the finest in the world, and Kansas grows plenty of it. Jewell county is the best alfalfa-producing county, and it is also the best bee county. However, the whole State is rich in clovers, and this also, is good material.

The hives should be placed near a group of small trees, and on the east side of them so as to be protected from the hot afternoon sun and the driving rains from the west and north.

It may seem like useless advice to say that one should never work around bees without being adequately protected. Many people seem to be, for a time at least, immune from bee stings. That is all right so long as it lasts, but bees have a very strong sense of smell, and if they do not like a person they get angry and sting. One may work around bees for weeks without suffering a single sting and then some day he may perspire freely with the result that he is badly stung. Bees become very angry when they detect a sweaty odor.

The Italian Bee is Best.

How many persons know what the comb is made from? Many think it is honey. But it is prepared from a wax which oozes out from the under side of the abdomen of the bees. The bees must eat twenty pounds of honey to produce one pound of wax. On the other hand, one pound of wax made into comb holds twenty-four pounds of honey.

Some persons are unable to eat honey, as it makes them sick. This is due to the presence of a very little quantity of formic acid in the honey. This acid gives the true flavor to the honey.

It has been satisfactorily demonstrated by government experiments that the Italian bee is the only one suitable for the United States. There are, however, several varieties of the Italian, and any of them are good.

HOTEL BENTON

(European)

819 PINE ST., ST. LOUIS, MO.,
Makes a special low rate to Stockmen,
Cattlemen and Shippers of 50c, 75c and
\$1.00 per day. One block from Post
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Horseman

J. T. Collins & Son, N. Middletown, Ky., sold their splendid stallion, Beechwood Pride, to J. B. Bowles and L. P. Dickerson, of Bardstown, Ky., at a long price.

Alvin Meyers, Mt. Sterling, Ky., sold to Roy Nickell, Ezel, Ky., the walking black stallion Black McDonald by McDonald Chief, dam Lucy Perry by Blue Jeans.

H. L. Ponder, the well-known attorney and horse fancier, Walnut Ridge, Ark., has bought Royal Maid, a four-year-old daughter of Mercer Chief, bred to Bohemian King.

The Saddle Horse Association is not alone in its controversy over a proposed change in entry rules. Trotting horse breeders are also absorbed by propositions to close the rules to all except those by registered sire and dam.

The demand for saddle bred horses increases as the automobiles become more common. Indications point to an unusual demand for saddle stock this spring. S. T. Harbison, Lexington, Ky., writes us: "The inquiry for saddle horses continues strong."

J. F. Crenshaw, the Collierville, Tenn., saddle horse breeder, purchased during the holidays from Allen S. Edelen, Glenworth Farm, Burgin, Ky., Circus Girl 8930, the good daughter of King Squirrel. Mr. Crenshaw will breed this mare to his fine young stallion, Bothemian View.

P. W. Ray, of Bowling Green, Ky., who has been in Missouri buying some fine mares, we understand has been confined to his home with a spell of grippe. The last information we have he is improving and will soon be himself again. He writes his stable of horses is doing extremely well.

Quality Lady, b. m., by Red Heart, won the \$500 2:25 pace at the Sikeston, Mo., meeting on September 10. And on the 20th won the \$300 2:17 pace, and finished up the meeting by winning the \$150 2:20 pace on the 21st. There was but three days of the meeting or her winnings might have figured larger.

Oscar I. Edwards & Son, De Soto, Mo., sold for F. P. Perkins, Vineland, Mo., the saddle stallion Dr. D 5323, by Gold Chief 3137 by Golden King 2359; first dam Lady P. 2328 by Monte Cristo 20438. This horse goes to H. P. Wicklein, Evansville, Ill. They also sold a great combined gelding to Dr. F. E. Skinner, De Soto, Mo. This horse is by High Chief 2211 out of a daughter by Monte Cristo 2438.

A bill is to be introduced in the legislature asking for an appropriation with which to build exposition buildings on the grounds of the Universal

Exposition Company, at St. Louis, Mo. It is the belief of those in charge that St. Louis is the location for a big live stock and agricultural show. And they are of the opinion that it will not interfere with the Sedalia State Fair.

Baron Hal 2:07½ was one of the fastest performers on the middle western half-mile tracks this season. He is by Baron D., p., 2:10½ (brother of Bumps, p., 2:03½, and Moko); dam by Star Hal, a son of Brown Hal, p., 2:12½, etc. At Iola, Kan., he equaled the state pacing record by turning that track in 2:07½, reducing his own four-year-old record of 2:07½, made on the Dallas track. Baron Hal was bred by S. W. Knight, of Fort Worth, Texas, and passed to J. W. Dyer, of Bryan, Texas, his present owner, and was raced by Trainer Brennan, of Corsicana, Texas.

Howard Bailey, of the Maxwell-Crouch Mule Company, East St. Louis, while in Boone County last week purchased 179 head of high grade mules for which the feeders received good prices. A large majority of them were fat cotton mules, but there were some good big mules among them. All of them have been shipped to St. Louis. W. H. Thompson sold Mr. Bailey 46 head for which he received \$210 all round. Reuben Schryock of the Stephens Store neighborhood, let Mr. Bailey have 47 head that he got \$210 a head for. Frank Thompson sold him 31 head at an average of \$213.50 a head. In this lot was one pair that brought \$500 and another that Mr. Bailey paid him \$465. Wright Bros. added to his purchases with 55 head which netted them \$215 a round.

There appears to be no special interest or effort put forth by the extremely fashionable show horse gatherings to contribute to any advancement in breeding the type of animal most popular and winning the largest attention and awards. Indeed, so far as reports go, at least, pedigree is one of the matters given little or no consideration, only so far as classifying contestants is concerned. This classification is so general as, among light horses, to take note of roadsters only as a class, saddlers, etc. In the recent New York show some notable performances were reported as made by the roadster class, in the way of brilliant exhibitions of speed and action, as well as in exhibiting individual qualities of performers. In speaking of Wm. P. Kearney's horse, Triumph, Canadian owned, it was remarked indeed concerning him that he is "a sensational mover and mated with suitable mares should have a future in the stud, no matter where he may be."

MISSOURI SADDLE HORSE BREEDERS.

The Missouri Saddle Horse Breeders' Association held its annual meeting on Thursday, and among the prominent speakers were Mat. S. Cohen, the man who so successfully exhibited the saddle mare Edna May and the famous black saddle stallion, Kentucky's Choice, and Herbert J. Krum, of Lexington, and P. W. Ray, of Bowling Green, Ky. The saddle horse breeders passed resolutions asking the state legislature now in session to appropriate a liberal amount for a new live stock pavilion for the College of Agriculture, and money for more and better live stock. The horsemen banqueted Thursday night and adjourned to meet at Mexico, Mo., April 17, 18 and 19, 1913. The following officers were elected: President, Jas. A. Houchin, Jefferson City, Mo.; vice-president, Robert Brown, Paris, Mo.; treasurer, Wallace Estill, Estill, Mo.; secretary, Rufus Jackson, Mexico, Mo.

L. E. CLEMENT'S WEEKLY LETTER.

Editor RURAL WORLD: I can remember when it was impossible for me to think of S. P. Hunter without a feeling of pity, that he should have to try to make a reputation as a horseman with a son of Bismark. Now he has one of the very best sons of Alerton (the sire of more trotters than any horse to the present date). Did you ever think why Millerton 2:28 should be one of the best sons of Alerton. At the present time he is the sire of 8 trotters and 3 pacers, one of them in the 2:10 list. His dam Gul Bahur by Guy Wilkes is the dam of Marvel Bahur 36856, sire of 2 trotters, one of them a three-year-old. Great sires do not come by accident, they are bred and very few if any, that are great, but are out of dams that are great themselves. I was surprised at Mr. Hunter's statement with reference to his black faced saddle horse: "Goes all the saddle gaits, he is standard and registered: Morgan and Goldust cross." Might just as well say Electioneer and Hambletonian or Wilkes and Hambletonian. The sire of Goldust was a typical Morgan, sired by Barnard Morgan, son of Gifford Morgan, about as close to the fountain head as you could well Goldust is a Morgan, in the male line, but not like his sire, a typical Morgan. I never saw one of his colts that would not kick with one foot, not viciously, but enough to knock the lines out of a man's hands, if he were not watching. I have seen many of the Morgans that went the saddle gaits, without any teaching. Old Justin Morgan's dam was a pacer, and Mr. Wallace has shown that most of his sons were out of pacing-bred dams—in fact, all of his prominent sons. Anyone knows how naturally our saddle-bred colts now take the distinctive saddle gaits, even while following their dams. So that the Vermont Morgan's saddling naturally need be no surprise to anyone. Blood's Black Hawk and his get did almost or quite as much, in the formation stages, of the gaited saddle horse, as Denmark or any of his tribe, although as Hambletonian, by his opportunities and the opportunities of his sons, has dominated the minor families in breeding the trotter, so has Gaines Denmark, that was defeated in the show ring by Cabell's Lexington, by Gist Black Hawk, son of Blood's Black Hawk, dominated the other elements that have gone to make up the gaited saddle horse of to-day. Yet I have in mind a Denmark saddle horse owned in Springfield, Mo., that has four Morgan crosses, yet in his appearance in harness or under saddle, he is a typical Morgan.

The horse Royal Reaper, 2:11½, that was bred in Jasper County, Mo., as was his dam and granddam, won over \$8,000 in 1912 and was the largest money winner in Austria. I did not like the horse, but in his new home he has made good. Miss Emma R. Knell bought a son of Baron Wilkes, out of his dam, that is every way a better individual, and notwithstanding the earning capacity of the son of Early Reaper, I should rather have the son of Baron Wilkes, for he is siring good individuals, with phenomenal speed. In fact, the parties owning them claim they could have taken the yearling record for colts on a half-mile track, with the son of Athene, 2:29½, by Victor Ene. It is not always the fastest trotter that sires the most trotting speed. There were few sons of George Wilkes that have left a better progeny, of good individuals, than Baron Wilkes, and he is breeding on through sons and daughters, with possibly more regularity than any son he has left. I do not believe that Royal Reaper will

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LEXINGTON, KY.

Herbert J. Krum, Editor.

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By R. BOYLSTON HALL.

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sire any more speed than Baron Will Tell, and the latter will always sire the best individuals. Baron Will Tell and his dam McGregor Will Tell, by Kankakee, are both with us, and will still be doing good work for the breeders of Southwest Missouri. Maud McGregor, out of Maggie McGregor, by Robert McGregor, has left a line of descendants not surpassed possibly anywhere in the world. She has two daughters by Early Reaper, one now has a filly by Sorento Todd and is bred back, the other will be bred in 1913. She has not left a daughter that should not enter the list of great brood mares, if given anything like like reasonable opportunities.

Miss Kankakee 2:17½, owned by Mr. H. G. Tangner, of Carthage, Mo., was bred in 1912 to R. Ambush 2:09½, but will not bring a foal in 1913. This is a daughter of Maud McGregor, that should be among her best. All McGregor, by Ben McGregor, out of Maud McGregor, his own daughter, is now the dam of 2 trotters and 1 pacer, has a two-year-old by McEl Roberts, the greatest speed siring son of Robert McGregor, he should make as positive a sire of speed as was ever bred. His dam is now in foal to Genl. Watts (3) 2:06½, with 16 trotters in the list and not yet ten years of age. While we keep such sires as Genl. Watts, Peter the Great, J. Malcomb Forbes, Echo Bell and Capt. Aubrey on this side of the water, it matters very little to us what they have on the other side, we shall still be able to breed and send over winners.

COHEN AT COLUMBIA.

One of the features of the meeting at Columbia, Mo., on the 16th inst. of the Missouri Saddle Horse Breeders' Ass'n., was an address by Matt. G. Cohen, of Kentucky, one of America's leading saddle and harness horsemen. He said among other things:

"There are many great men in and of your state, some are self-made while others have become famous through the channels of the Saddle horse industry, the horse really making them. Why, 'Pick' Hawkins tells me that Missouri King made him sheriff of his county; Col. Paul Brown says 'My Major Dare' has given him a national and international reputation; Bill Lee swears that his horse-operations have made his name the household word in every Missouri home; Ben Middleton says until he bought Rex McDonald he was only known to the postmaster of his town, and Brother Houchin tells me confidentially that Astral King will, eventually, make him Governor of this great state while Eli Hill claims it was the celebrated Holstein cow, Josephine that put Columbia on the map.

"You are bound to admit that the livestock industry has been a potent factor in placing you in the honored position you occupy to-day. Why, my friends, let Miss Long, Col. Brown, Hook & Woods, Lee Bros., O.J. Mooers, John Arnold, Rufus Jackson, E. D. Moore, Houchin & Anderson and others of equal note, cease their operations and you would see the fine horse business in Missouri as dead as prohibition in Tennessee.

"But, laying aside all humor, I am glad to be with you, and when I look upon the magnificent buildings of this wonderful institution, and see in every nook and every corner, the valuation and appreciation you have bestowed upon this younger generation, giving to them the benefits of the environments of honest, trained, capable minds, ignoring the expense and looking only to future possibilities, I no longer marvel at your wonderful progress, nor can I estimate, or prophecy your future achievements. Honestly, as proud as we Kentuckians are, I can

not but feel the bitter pangs of 'envy' and wish my parents had lived in Missouri during the month of August, '71.

"Yes, I'll testify that you Missourians are hard to beat in any kind of competition. There are others, too. Why, I have a friend in Kentucky who shows mules. Two years ago he shipped out to Missouri, tackled the Missouri mules, and went down in defeat. A few days after his return I met him on the road and said, 'Well, Took, what luck?' To which he replied, 'Mattie, don't you know they beat my pair of jacks?' I said to him, 'That's nothing, they beat Star McDonald, Edna May, Red McDonald and Kentucky's Choice, four of a kind, for me.'

"My mule friend has never been back to see you but the lickings you gave me have not hampered my desire to tackle you again, and right now I serve notice on you that I am going to be troublesome this year.

"You know, we never really respect a fellow until he has 'licked' us, and that being true, will leave you to imagine how near and dear you are to me, especially, the young lad who, this noon, termed me the 'John Hook' of Kentucky. I failed to thank him then, but do now with all the sincerity of my soul."

MISSOURI DRAFT HORSE BREEDERS' MEETING.

The Missouri Draft Horse Breeders' Association held its annual meeting, which was a decidedly interesting and enthusiastic one. That the draft horse was coming into its own in Missouri was evidenced at this meeting. The interest shown by those in attendance was sufficient to justify the conclusion that Missouri is to be a draft horse state. Those who now have draft horses are advocating their more extensive use by those who do not have them. The program was a practical one, and those who heard the addresses were fortunate. The men who talked were practical breeders and thoroughly in touch with the draft horse situation in Missouri and other states. It was the sentiment of those present that the importance of good sires and dams were absolutely essential elements for consideration for successful draft horse breeding. Missouri breeders were urged to breed better horses and more of them.

THE DEMAND FOR SADDLE HORSES.

The fact that it was recently possible for a Tennessean to sell a saddle horse for \$6,500 is not at all discouraging to those who, in spite of many obstacles that at times have appeared almost insurmountable, have continued to hold to their faith in the future of the horse breeding interest in this state.

The most encouraging feature of the transaction is found in the fact that this horse, sold for so handsome a price, is a product of Tennessee. His dam was unfortunately destroyed in a fire, but his sire is still alive and is owned in Smith county, a section of the state that had more than a local fame for its superior saddle stock half a century ago.

In the old stagecoach days Wilson, Smith and Putnam counties constituted a saddle horse breeding center unrivaled in any other territory of like extent in the state. At that period the ideal saddle horse possessed but three gaits, the fox trot, rack and singlefoot, but in these more modern times the five-gaited horse is not uncommon. The addition of the two extra gaits is the result of development, combined with systematic scientific breeding.

The term scientific is used advisedly, for naturally the saddle horse is



Good Crops of Oats were Formerly the Rule; Now a Good Crop is the Exception.

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endowed with but three gaits, not counting the running walk.

While some of the original (foundation) saddle horse stock of the country named in the foregoing is still extant beyond all question, the breeding center of this particular tribe of horses is Maury county, though Davidson county is not far behind in the quality of the horses bred in this section of Tennessee Blue Grass. But disregarding quality, Maury county in the number of saddle horses is far and away in the lead of all other counties in the state.

The ideal saddle horse is an educated horse; that is to say, while in his lineage he represents a distinct type and is inclined to go his gait naturally, it is necessary to teach him to go them well. This is a matter that the average breeder has entirely overlooked, being content to "let nature take its course."

As to "fitting," a single instance of the importance of education will suffice:

A Lexington, Ky., dealer bought for \$250 a Tennessee saddle gelding taught him to go his gaits stylishly and smoothly, and in ninety days sold him for \$1,050 to go to Cleveland, O. Here was a clear profit of \$800, or, deducting the expense of shipment, \$700.

The sale recently by Senator Ernest Smith, of Smith county, of the saddle stallion Major Dare to a St. Louis man for \$6,500 should be an inspiration to the breeders of Tennessee. But the purchase price is not all; the horse in the two years that he has been shown at the fairs and horse shows won considerably more than he was sold for, so that at the least calculation he netted his owner around \$15,000. As far as can be ascertained, no other Tennessee saddle horse has ever before been sold for \$6,500.—Nashville Banner.

BACK TO THE HORSE.

Apparently the tide is turning! Government statistics show there are more horses in the country than ever, and of greater individual value, while really first-class horses of all types are "worth their weight in gold." According to the New York Times, a number of prominent people are also turning back to the horse, and Mr. William J. Smith of Greenwich, Conn., has returned to his first love. Twelve years ago he owned and drove roadsters, he fell into the auto habit, but is again driving horses sixteen miles a day and enjoying himself while he does it. Several other wealthy Greenwich men announce their intention of following Mr. Smith's example.

Rod and Gun

FAMOUS SPRING LAKE CLUB HOUSE BEING TORN DOWN.

The famous Spring Lake Clubhouse, located on the east bluffs of that well-known hunting and fishing resort, about three miles east of the Illinois River, in Tazewell county, is being torn down and the material utilized for the construction of farmhouses. The reclamation project commenced a few years ago, which has converted the major portion of the lake into corn fields, has finally reached the old clubhouse, which for a quarter of a century has sheltered thousands of nimrods, many of them famous in public life, and coming from many States. Two presidents, Grover Cleveland and Benjamin Harrison, have occupied rooms in this building, and many others of prominence affixed their names to the register. The building was the largest of the kind in Illinois, perhaps in the West and contained fifty-two rooms. During the height of the hunting season the structure was crowded to the limit with duck hunters. When first projected a club was formed, known as the Spring Lake Hunting and Fishing Club, and shares of stock were sold, sufficient to erect the building and lease the lake and swampy land contiguous. The clubhouse cost \$26,000, and was managed for many years by Bud Johnson.

For twenty years the resort flourished and thousands of hunters made it their headquarters while they sought game birds at the lake and on the Illinois River. When the drainage commissioners decided to drain the water from the lake the hunters sought to block the move by an appeal to the courts. They lost, and the work of reclamation proceeded. There are now about forty farms where formerly the hunter and fisherman found rare sport. Only the lower end of the lake exists, and for the past two years the old clubhouse has been untenanted. The only practical use that could be made of it was to wreck it and use the lumber for the erection of the farm homes of the vicinity. The transformation from the haunt of the wild bird with the marshy soil and wild rice to the rustling corn leaves and activity of agriculture is remarkable. While it creates regrets among the hunters and fishermen, the reclamation has added more than \$1,000,000 to the agricultural wealth of Illinois.

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The Pig Pen

FEEDING HOGS FOR PROFIT.

There should be a variety of other foods besides corn. Soy bean hay makes a good feed and contain sufficient protein for brood sows. Clover hay is also much relished, and alfalfa is even better; every hog feeder should have some alfalfa hay for winter use.

I have obtained the best results by feeding grain but twice a day and only what the hogs will eat up clean at each meal. Every basket or shovel of corn is counted and if there is any left uneaten in an hour or two, the amount is cut down at the next meal. In feeding too heavy there is a very large waste of grain.

I regard it just as essential for the hog as for the steer that he should have an abundance of pasture the year around, if possible. The ideal hog pasture is alfalfa or a mixture of clover with an abundance of green feed throughout the season. With soy beans, clover and rape, it is easily possible to have a succession of green feed until December. I have used rye and vetch in a successful experiment as a winter feed. These may furnish green food almost the year round in central and southern Illinois.

I believe it possible to keep the animals in such a healthy condition that they will be able to resist disease. Three things are absolutely essential: Clean feed, pure water and dry, comfortable sleeping quarters. Their food ought to be just as clean as that of any other animal, except in the case of hogs following cattle. Neither a hog nor a steer can stand out in zero weather and shiver while eating without loss of flesh and loss of profit. The feeding floor should, if possible, be on the south side of the building. If necessary, put up a protection six feet high on the west and north to make the hogs comfortable while eating. Keep the floor perfectly clean or otherwise you might just as well feed upon the ground. This will be easily accomplished if the feeding floor is 75 or 100 feet from the sleeping quarters. Never feed in the shade.

Hogs drink but little at a time and it is absolutely essential that they have all the water they want and whenever they want it, day and night. I have arranged cement barrels in the ground with cement troughs on either side so the dirt can not get into the barrels, and a tank heater in one barrel keeps the water constantly open in the coldest weather.

Under no circumstances should pigs be allowed to sleep in straw stacks or manure piles or in any place where they will get steamy or sweaty; under such conditions they will become unthrifty and will not pay for the feed they eat. Sleeping places should be well ventilated and the bedding changed at least once a week. I prefer slough hay for bedding, though I have used oats straw or shredded fodder.

I keep wood ashes before the pigs all the time and consider them essential to the development of the strength of bone. We have often made mistakes in thinking we can breed for bone. To make a self-feeder for wood ashes, take a dry goods box and put a sloping bottom on the inside of it and then build a trough next to the ground, leaving enough space for the ashes to work down into it. Put a hinged cover on the box and fill with ashes and salt (four quarts of salt to a bushel of ashes); let the pigs have free access to it all the time. I believe coal ashes are constipating.

I think it necessary to retain flesh on the brood sow by heavy feeding during the suckling period, but the

feed must be gradually increased for two or three weeks after farrowing to reach this full feeding. The feeding of very nutritious slops too soon after the pigs are farrowed creates a flow of milk too fast for the young pigs causing them to scour. One reason why I defer the farrowing season until May is that the brood sow may run on the grass two or three weeks before farrowing time; nothing will put them in better condition.—H. A. McKeen before Illinois Institute.

MANAGING TWO LITTERS A YEAR.

I never breed a sow before she is nine months old, and always raise two litters of pigs a year. The fall litters come September 20 to October 1. Pigs born in November and December just at the beginning of cold weather, unless exceptionally well cared for, are liable to remain pigs until the next spring or later. The spring litters come March 20 to April 1. I would rather have them come a little earlier, but do not like to risk a cold spell by having them come in February or early in March. In caring for the brood sow plenty of exercise, with green feed, roots, etc., is very essential. The feed I provide is mostly muscle and bone-producing, such as bran, middlings, oil meal, ground oats and skim milk. It is not the part of wisdom to load the brood sow down with fat by feeding her too much corn. This grain does not contain the necessary elements for the proper growth of the unborn pigs or the well-doing of the sow at farrowing time. I give my sows a liberal supply of salt and wood ashes, which helps to satisfy an appetite that sometimes causes a sow to eat her pigs. I let them have the run of a wood lot and a blue grass pasture. About a week before farrowing I put the sow in a clean, warm pen by herself, and do not give her much bedding and never disturb her. When she is about to farrow I feed her lightly for two or three days previous. I always try to be present at farrowing time to assist the sow in case help is necessary. After the sow has farrowed I give her plenty of clear, cool water, as her system is apt to be in a feverish condition. I feed her lightly for several days with bran and skim milk, gradually increasing the feed. As soon as the pigs begin to partake of food other than that received from the dam I give them some middlings with milk and a little soaked corn occasionally. I watch them pretty close the first month, for on this depends the future profit or loss. If the pigs do not get milk enough they will be stunted, while, on the other hand, if they get too much they will have the scours. By feeding them well for seven or eight weeks they will be ready to wean without a back set. Exercise is a very important feature for the proper development of bone and muscle of little pigs, and if the sow is confined in a pen, which is poor policy after the pigs are old enough to run about, but often the case on many farms, an opening should be made where the pigs may go in and out at pleasure.—William Hardy.

It is a mistake to keep feed continually before the hogs after they have been put on full feed.

The choice among different breeds is more a matter of personal preference on the part of the hog raiser than of real superiority of any one breed.

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A strange thing in breeding is seen in that all pigs of a litter are not the same—one is nearly sure to be better

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than the others, or one has inherited some of the characteristics of ancestor. But this makes it interesting and gives opportunity for selection and variation.

Premature or over feeding of the sow after farrowing may not affect her, but it will affect the pigs. If the food is too rich, the pigs will either scour or acquire the thumps. If the food be too much corn, which does not tend to produce milk, and the sow dries up, her pigs either discontinue to exist or develop into runts that are unprofitable.

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GLOBE PRINTING CO.

ST. LOUIS, MO.

RURAL WORLD and GLOBE-DEMOCRAT EITHER ADDRESS, BOTH FOR \$1.00 NET.

The Shepherd

SILAGE FOR BREEDING EWES.

At the Missouri Experiment Station in the winter of 1911-1912, one lot of ewes were fed on corn silage and grain; one on corn silage, grain and clover hay; and one on corn silage and clover hay. The grain consisted of corn 6 parts, bran 3 parts and oil cake 1 part by weight. The ewes were put on feed December 9th, and kept on these rations until lambing.

The grain and silage lot ate on the average per day. 39 lbs. grain and 4.07 lbs. silage, per 100 lbs. live weight, in this lot of twelve ewes, eleven were with lamb and produced 11 lambs. So, of the ewes that lambed there was 100 per cent lambs, 10 or 91 per cent of which were strong and vigorous. The lot receiving grain, hay and silage ate on the average per day .34 lbs. grain, 2.05 lbs. clover hay and 1.85 lbs. corn silage, per 100 lbs. live weight. In this lot, 10 of the 11 ewes were with lamb and produced 14 lambs or 140 per cent, of which 13 or 92.8 per cent were strong and thrifty. In the lot receiving clover hay and silage, 15 of the 16 ewes lambed and produced 19 lambs in all, or 126.66 per cent. Fifteen or 78.9 per cent were strong and 4 or 21 per cent were weak. The average amount of feed eaten each day by these ewes was 2.29 lbs. clover hay and 2.83 lbs. silage, for each 100 lbs. live weight.

From the results obtained with the lot receiving only silage and hay it would seem that unless the ewes are in extraordinarily good condition, the addition of grain during part of the winter, at least, would be advisable. Silage alone for this one year proved to be satisfactory roughness for pregnant ewes when fed with grain. Considering, however, that no twin lambs were born in this lot, the silage and grain ration must be considered inferior to the ration composed of silage, hay and grain. The experience of practical feeders and the results at other Experiment Stations, bear out these conclusions.

It should be further stated that in the three lots receiving silage, 11 ewes were lost during the last week in December, and as far as could be determined the loss was caused by moldy silage. From the first week in January to the first of April, the ewes were fed silage without further ill effects.

A few cautions must be observed in feeding silage to pregnant ewes. The silage must be of good quality. Moldy or sour silage is very dangerous. Two or three inches should be used off the top of the silage daily, otherwise it will ferment and mold. Frozen silage is dangerous to feed, as it chills the digestive tract and may cause abortion.

SHEEP ON THE AVERAGE FARM

The time is at hand when the sheep on nearly all farms will have to be looked after more and given more care than they have been getting. This gentle and timid, and sometimes long-suffering variety of farm stock gets less attention on the great majority of the farms than any other thing on the farm.

There is hardly an owner of a small flock of sheep on an average farm who does not neglect his sheep a great deal more than anything else on the place. And really the majority of sheep owners if they had to give as much attention to their sheep as to their hogs or cows would not keep them at all.

But, nevertheless, the sheep is worth more on the average farm for the amount invested in them and

the cost of keeping than any other stock we keep.

This is mainly because from the time that the sheep can begin to run the pasture in the Spring till the necessity for feeding in the late fall or early winter, the flock of sheep live on pasture. That is, on grass, weeds, clover, pine leaves or any other old thing that other stock refuse. And sheep do well on such things and keep fat; and, of course, they convert into money many things that hogs and cattle can hardly be starved into eating.

But the balmy summer days are gone, and though the sheep is entirely indifferent to the coldness of the weather—when it is dry—it does like a dry shed to protect from rain. And it can get along on almost any old forage that other stock refuse.

The sheep is very partial to green things, and I suppose would like ensilage very much, but I have no silo, and do not know from experience. But there is one source of greenness on my farm that few people have. That is some steep hill sides that have been completely taken possession of by the honeysuckle vine.

When every other green thing has ceased to grow, and the fields are brown and worthless as pastures, the honeysuckle is in as flourishing condition, as it ever gets to be even in mid-summer. Then the sheep find the honeysuckle patches very inviting.

On my farm some steep hillsides, with the inferior growth of anything else, not even excepting briars and bushes, there is a most luxuriant growth of honeysuckle, that stays as green in winter as summer, and there the sheep have a good time whenever allowed to graze on it. As to the nutritive value I have no knowledge, and am indifferent to it, as I have plenty of forage for them; but so long as the sheep eat the foliage of these vines and prefer them to everything except grain, I think it best for them to graze there.

By spring they get the vines pretty well grazed down, but they never die, in fact I first put the sheep on them to kill them out. I think, after all, it is a good thing. The hillsides are too steep to cultivate, and I doubt if I could put any forage crop there or elsewhere that would afford as much grazing. As to the percentage of nutriment in the honeysuckle leaves I have no knowledge, and don't suppose that any scientist has made an analysis, but so long as the sheep flourish I have no interest in the analysis.

There are few people, though, who have a perpetual sheep pasture, as I have, and others must rely upon the normal products of the farm. And even if one had a pasture of any sort that the sheep might live on it, it is better to give them more than the mere living that they can gather for themselves.

If one expects a nice lot of spring lambs, the sheep should be kept in

good condition. They get along on things that other stock do not care for. But by all means give the sheep plenty of clean water, and on whatever forage they are fed, have it fed in a way to keep it clean. It is easy to make racks to hold roughage of all sorts, and it pays well to have racks to feed them in, rather than on the ground.

I have found it a good plan to have a good pasture of orchard grass or early sown rye to serve through

the winter, and we usually have a large patch of turnips, which make a big growth in the early spring, and the sheep seem to have a great liking for them.

I do not think the turnips themselves or the tops are very nutritious, but in England, where probably the finest mutton sheep in the world are produced, they seem to think highly of turnips for sheep and sow a large acreage. I am sure it pays to do it.—Farm Progress.

INCORPORATED 1901

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Bust. in. Waist. in.

Name.

Address.

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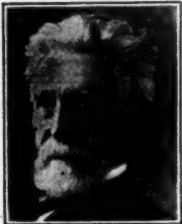


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Norman J. Colman.

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The RURAL WORLD is published on the cash in advance system and the paper is stopped when the time paid for has expired. If subscribers receive a copy with this notice marked, it is to notify them their time has expired and that we would be very glad to have prompt renewal. While our terms are One Dollar per annum—a low price considering the high quality of paper we use—yet so anxious are we to extend the benefits that we believe the RURAL WORLD confers on all its readers that we will for a limited time take subscriptions, both new and renewals, for 50 CENTS A YEAR. "Once a subscriber to the RURAL WORLD, always a subscriber." Farmers can't get along without it. Please remit P. O. money orders, or checks on St. Louis banks, as our banks all charge five cents for cashing local bank checks, however small. We appreciate the kind efforts of our patrons in all parts of the Union in speaking good words in behalf of the RURAL WORLD, and it is to these efforts we attribute our constantly increasing circulation.

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Contributed articles, communications, etc., on pertinent subjects, are invited. The Editor assumes no responsibility therefor, however, and their publication in nowise implies editorial endorsement, beyond the Editor's belief that frank and courteous discussion of all questions within the province of this journal is to the best interests of our readers.

Entered in the post office at St. Louis, Mo., as second-class matter.

Be good tempered and happy and enter into all the innocent sports and pleasures of the young folks.

The total production of wheat in Argentina, Australia and New Zealand this season is 321,000,000 bushels, or 130.7 per cent of the production in those countries last season.

More than 1,000 farmers attended the six-day farmers' meeting at Columbia last week. L. F. Cotter of Edina, Mo., won first prize for the largest yield of corn to the acre with a record of 100 bushels and 5 pounds.

Every farmer should do everything possible to support the parcels post. It took long years of hard work to get the law enacted, and now that we have the privilege of a big reduction in cost of sending parcels let us enjoy it.

Farm credits is a question that now comes to the front, and will not down. If a farmer can change his indebted-

ness from a three-year to a fifteen- or twenty-year annual payment system it is easy to understand how he could plan for the future to better advantage. The farmers must co-operate and they will then be in a position to demand their legitimate rights in this and other directions.

Vernon O. Lytle, mail carrier on rural route No. 5, out of Batavia, O., is the first man to accept and deliver under parcel-post conditions a live baby. The baby, a boy, weighing 10½ pounds, just within the 11-pound weight limit, is the child of Mr. and Mrs. Jesse Beagle, living near Gleneste. The "package" was well wrapped and ready for "mailing" when the carrier got it. Its measurements reached 71 inches, also just within the law, which makes 72 inches the limit. Mr. Lytle delivered the "parcel" safely to the address on the card attached, that of its grandmother, Mrs. Louis Beagle, who lives about a mile from its home. The postage was 15 cents and the parcel was insured for \$50.

The average of prices paid farmers for important crops (corn, wheat, oats, barley, rye, flaxseed, potatoes, buckwheat, cotton and hay, which represent about three-fourths of the value of all crops) declined about 6.8 per cent from November 1 to December 1, 1912, which compares with a decline of 1.9 per cent in the same period last year and an average decline of 2 per cent during November of the past four years. On December 1 the average of prices was about 17.1 per cent lower than on like date of 1911, 6.8 per cent lower than 1910, 13.6 per cent lower than 1909, 6 per cent lower than in 1908, and 9.2 per cent higher than the average of the preceding 10 years (1899-1908) on December 1.

The best Commercial Club for the small town, says C. O. Ransford, is the one that reaches out and takes in the farmer and makes him understand the efforts of the club in building up community interests will be more directly to his benefit than any other and only for the merchant as he prospers and chooses to spend his money with them. Let the town merchant show an interest in the farmer's business and get him interested in community welfare, better business for the town, better improvements, better schools, better churches, and a better moral influence and the farmer will make kindling out of the mail order houses' catalogues and be ashamed that he ever spent money with them. Try the County Agriculturalist and Agricultural Teaching in every school of the county, town as well as country. Get up a county poultry, corn, fine cattle and horse show. Get the boys as well as men interested in corn growing contests, offering prizes worth the effort and every interest of the community will advance.

FARMERS' WEEK AT COLUMBIA.

Missouri Farmers' Week at the College of Agriculture, Columbia, Mo., closed Friday night, Jan. 17, 1913, after a most successful session. One thousand five hundred and eighty-one farmers registered during the week, representing 104 of the 114 counties and twelve states. The men were there to learn. A four days' short course in every branch of agriculture was conducted by the College of Agriculture during the day, popular, interesting lectures were delivered in the evenings by the most prominent authorities and twelve state associations held their annual meetings and elected officers. Each of these associations sent resolutions to President-elect Woodrow Wilson endorsing H. J. Waters, President Kansas State Agricultural College, for Secretary of Agriculture.

SAYS INDIANA HAS BEST FARM LOAN PLAN.

While investigations are being made in Europe and elsewhere of a plan for lending money to farmers to help them pay for their land, Gilbert Hendren, chief clerk of the Indiana State Building and Loan Department, declares that Indiana has the best system for that business in the world.

At the instigation of President Taft Myron T. Herrick, United States ambassador to France, has been making an investigation of the farm loan system of that country, and he has made numerous recommendations to the President along that line. But, Mr. Hendren says that the Indiana plan is better than anything that Ambassador Herrick has discovered or recommended.

In his annual report Mr. Hendren says:

"On the same basis of the great progress made in the last six months by the Indiana building and loan association, within five years Indiana will have more than five hundred such associations, with more than two hundred thousand members and more than one hundred million dollars in assets.

"Therefore it is not an idle dream, but we believe a reality, that in the near future building and loan associations will be large enough and have money enough in every county in Indiana to furnish all the money needed to build homes and to supply at least a large part of the demand for farm mortgage and other real estate loans in their respective counties."

Mr. Hendren calls attention to one association in this state which, he says, with more than two million dollar assets, has about reached this point. The report then goes on to say:

"This association has furnished the money to build more than four thousand homes, and is now meeting the demands for a large part of the farm mortgage and other real estate loans in Madison County at 6 per cent semi-annual interest, five years' time, no commission and no expense of any kind except a small fee for examination of the abstract of title. The borrower has the privilege to pay any amount at any time on the principal and stop the interest on any such sum paid. Application can be made any day, and loan closed in a day or two, immediately upon inspection of the farm offered as security and upon prompt examination of the abstract of title.

"A large number of Indiana associations are doing a similar business, and many more are approaching the point of doing a similar business. We hope that every county in Indiana will soon have similar large building and loan associations, which, together with the Indiana insurance companies, will be able to meet the demands of all home builders and all demands for farm mortgages and other real estate loans, without the necessity of borrowing money outside of the state.

"When Indiana has reached this point, the home builder, the wage earner, the farmer and others who may need to borrow money on real estate mortgage, will be but little disturbed by the power of the alleged money trust and the panics of Wall Street.

"Hundreds of thousands of dollars that are now being sent out of the state annually for interest on loans of foreign insurance companies and other foreign financial institutions, would remain at home, and thus greatly increase the financial prosperity of our own state. Then indeed, 'The American home will be the safeguard of American liberties.'"

"All of the associations of the state

are under strict state supervision, under the new building and loan law, just as are the banks of the state," Indianapolis News.

MISSOURI ASSOCIATION OF COUNTY FAIR MANAGERS HOLDS ANNUAL MEETING AT COLUMBIA, MO.

The annual meeting of the Missouri Association of County Fair Managers was held in the Agricultural Building at Columbia, Mo., on January 15, 1913, during Missouri Farmers' Week. Great interest was manifested in the meeting and most of the prominent fairs of Missouri were represented. Something over twenty of the most prominent fair associations of Missouri are represented in this association, and more of the county fairs will be represented in a very short time. This is an association which Missouri is greatly in need of and no up-to-date fair association can afford not to be a member. There is a wide field of activity in this work.

During the meeting addresses were made by Dr. A. W. McComas of Sturgeon, Mo., J. Allen Prewitt of Independence, Mo., Chas. Viles of Bollivar, Mo., Jas. A. Houchin of Jefferson City, Mo., Dean F. B. Mumford, and Messrs. Will Thomson, McDermott, Roberts, Ed. Moore, B. E. Hatton, and Miss Knell of Carthage, Mo., the only woman to hold the office of secretary of a fair association in Missouri. S. M. Jordan, of Sedalia, Mo., talked on the importance of proper classifications in the seed and farm products departments of our county fairs, and brought out some very important features.

INDIANS ON THE WARPATH AGAINST TREE KILLERS.

The Black Hills beetle, which through neglect to apply the proper method of control at the proper time, killed, during the period from 1897 to 1907, more than a billion feet board measure of the merchantable sized timber in the Black Hills of South Dakota, was found in 1911 to be threatening similar devastations in the valuable timber of the Tongue River Indian Reservation of the Cheyenne Indians in southeastern Montana.

A co-operative beetle control project was organized in which the Branch of Forest Insects of the Bureau of Entomology, U. S. Department of Agriculture, gave advice and instructions, the Indian Service of the Department of the Interior furnished the funds, and the Cheyenne Indians did the work.

Eleven thousand and seventeen trees were cut and barked between July 1, 1911 and July 1, 1912, in order to destroy the beetles. The fact that a large percentage of the trees which harbored the beetles was sawed into lumber by mills installed for that purpose resulted in a total net cost of but \$903.53 against a probable saving for the next ten years, in the stumpage value of the trees (estimated at seventy-five thousand to one hundred and twenty-five thousand dollars).

More than 40 million dollars' worth of agricultural implements were exported from the United States to foreign countries in the calendar year just ended. Ten years ago the value of the exportation of this class of manufactures was 18 million dollars; twenty years ago it was but 4 million dollars. Thus the value of this particular class of manufactures exported in 1912 was nearly two and a half times as much as a decade ago and ten times as much as two decades ago.

FROM BATES CO., MO.

Editor RURAL WORLD: Not seeing very much from here perhaps a few notes would be of interest to a few of your many readers.

It has been very dry and stock water has been an object. Wheat and meadows are looking bad on account of dry weather. Corn in southern part of county is rather poor, caused by the dry weather and chinch bugs.

There has been more plowing done this fall and winter than I ever saw. In fact, last Friday and Saturday, Jan. 17 and 18, was real spring weather. I want to say I am pleased to know C. D. Lyon is connected with the RURAL WORLD and we will continue to receive his notes for some time at least. The RURAL WORLD has come to my house for eighteen years, and now the first thing I look for is "Notes from an Ohio Farm." I have often thought I would send Mr. Lyon a letter to tell him how much I value his notes but time hindered me.

I have been reading everything about seed corn I have seen. Last spring I sent north for a half bushel of Reeds yellow dent seed corn tested. I took pains in planting but it did not come up very good, so I went into some shocks which stood out all winter and selected seed to replant, and I believe every kernel came up, and it was way ahead of the rest at laying-by. Now it has been my experience that seed from shock corn has a better germination than seed from standing corn.

I remember, when a small boy, being at a neighbor's and seeing them select seed corn. The old man would, what he called testing, take each ear, the boys would pick out, select a grain near the middle and place it between his thumb nail and forefinger with the nail in the groove over the germ, holding it to his ear and pressing on it listening to the click. Those with the loudest click would be the ones selected; those that did not give a plain click were discarded, no matter how nice they looked. I have practiced it ever since I have been farming, in fact it has become a habit with me. Now if Mr. Lyon, or anyone else, has ever used this method I would like to hear from them. Seed corn from the north does not do very well the first year, but it is all right the second.

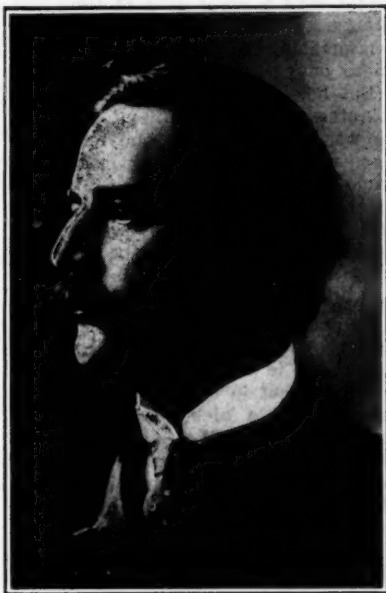
CHAS. CULVER.

STATE LINE PARAGRAPHS.

Editor RURAL WORLD: The heading of this letter means that these paragraphs relate chiefly to the extreme northeast corner of Clark County, which is the extreme northeast corner of Missouri. My home is one mile from the Iowa line and four miles from the Mississippi and the Illinois line. The outlines of Keokuk and Warsaw, along with the highlands of Iowa and Illinois, appear quite plain when viewed from Seven Pines, my home. This is stated to aid readers to know the base of supplies of the State Line Paragraphs, to use a term slightly military in expression.

The RURAL WORLD of January 16 is a banner number and a superb issue of the good, old-time publication which dates away in the past a year prior to the historic and heroic 49ers. The writers of the number are the veterans, and all of them are well qualified to treat their respective subjects.

Thus, in the array of five letters, George Enty tells in comprehensive language, all about the vital and excellent Dominiques, which retain their ranks through a long series of years. Early Alice gave a good talk along the line of chickens, and we are all profited by reading her sociable and instructive letter. F. A. Kuhn, from away down in New York state, gave a lecture on the Mallard duck which is real



H. J. WATERS,
President Kansas State Agricultural
College Candidate for Secretary
of Agriculture in President
Wilson's Cabinet.

good natural history of a fine fowl, and for his free and easy statement we are thankful. Of course Michael K. Boyer is always authority in whatever theme he writes or talks, and his testimony is convincing. E. N. Hendrix is a leader, and he is giving prominence to his home county, Lawrence. From his Illinois literary temple and farm, Agricola is in fine voice. I should like, though, that all writers would sign their real names. This would give authority and a neighborly feeling to their letters.

Thirty Years of Institute Work, by the veteran C. D. Lyon, is excellent reading, and I judge that the letter will go into my large scrap-book. The RURAL WORLD readers are wonderfully indebted to Mr. Lyon for his reports, and to him I am saying, Thank you, my friend; I am entertained and instructed by your words.

In the Home Circle, Helen Watts-McVey and Annie Hoffarth well maintain their rank, and to them we say, Come often and stay a long time. And now I come to one whose name, even, sounds good—Jacob Faith. Both names are strictly Bible authority, and our Jacob Faith is living for moral and spiritual upbuilding of the people.

In telling of how to care for peach trees so as to have peach fruit every year, I would add that this is the second winter that I have been protecting young peach trees as Jacob Faith advises. The system is working logically, and if followed every year, beginning when the trees are going into their first winter, the trees will live for many more years than if allowed to be exposed to the severity of winter.

So far, January 23, our winter here has been comparatively mild. One light snow, and five degrees below zero by the U. S. Weather Bureau thermometer, are the chief records. The Des Moines and Mississippi have been frozen over in places for a few days.

JASPER BLINES.
Alexandria, Mo.

T. R. Douglass left last Tuesday from Columbia, Mo., for Columbia, S. C., where he will attend the National Corn Show. He will have charge of the Missouri exhibit at the show. About thirty exhibits of corn will go from this state, besides exhibits of wheat, oats and other cereals. He took 10 ears of white and 10 ears of yellow belonging to his father, Jas. G. Douglass, of Shelbyville, to enter in competition with corn from anywhere in the world.

ITEMS OF INTEREST.

F. M. Owings delivered to R. M. Fountain 14 two-year-old steers that averaged 1,220 lbs. at \$7.25 and 34 hogs that averaged 215 lbs. at 7c.—Sturgeon Leader.

Wise man, that fellow Wilson. When he estimated the cost of four ball gowns he insisted that the inauguration should be simple and the ball left out.—St. Clair Co. Democrat.

Vass Cox, of southeast of town, delivered 90 head of 250-lb. hogs to W. T. Fodge last week at \$7.25. Mr. Cox also sold a dandy span of mules to Henry Brown for \$400.—Centralia Courier.

Silverton, Colo., Dec. 16, 1912. Dr. B. J. Kendall Co., Enosburg Falls, Vermont. Gentlemen: Since using your remedy for 30 years, I must say that there is nothing equal to Kendall's Spavin Cure when it comes to doctoring for lameness in horses. Very truly yours, W. N. Sisson.

There are just two things that govern the price of any article—quality and supply. There is no article of ordinary use that your home merchant can not buy in the open market. No catalogue house has a corner on good goods—if it had, it would increase the price.—Laclede Co. Republican.

Mr. James Grossman claims the blue ribbon for quick growth hogs. Last week he slaughtered two hogs. They were ten and one-half months old. One weighed 420 pounds and the other 390 pounds. They were red Poland-China and Mr. Grossman wants some one to beat the record.—Rocheport Progress.

Our state legislators are trying to devise some means by which the pay of country school teachers may be increased. The Herald heartily endorses that idea. A man can earn more these days training harness and saddle horses than he can training farmers' boys and girls.—Columbia, Mo., Herald.

The Frisco agricultural cars that were here Saturday were visited by quite a number of people who enjoyed the interesting and instructive lectures, which were given and illustrated with stereopticon views. There were also exhibits of interest to poultry raisers and orchard growers.—Conway Record.

M. E. Courtney and J. E. Peterson were here Saturday from Aldrich. Mr. Courtney is patenting a motor-plow that gives great promise of success. We shall be proud, indeed, if a Polk County boy shall have the honor of inventing the first successful motor-plow that can be worked even in the stumps and rocks of his home county.—Bolivar Herald.

The day before Christmas Tom Mackey, near Louisiana, set a trap and baited it with a rabbit. That night an owl came along hunting his Christmas dinner, and the trap working well, concluded to stay awhile. Next morning, a hawk tried to jump the owl's claim and the owl grabbed his leg and held on tight. When Tom came along, he found the owl and the hawk waiting for him to take 'em.—St. Joseph Observer.

Many merchants of this section have realized the connection parcel post created between the retailers and the mail order houses and are advertising that they will supply any customers' wants in this respect. Everybody may know a merchant and yet go to a stranger to do their trading, because this stranger has used some printer's ink and let the people know what he had and what he asked for it. See the point, Mr. Non-Advertiser?—Houston, Mo., Republican.

J. D. Tower & Sons Co., Fifth street, Mendota, Ill., have a very important announcement in our columns regarding their famous cultivator and the

pulverizer. Every corn grower knows the ground should be plowed deep, then completely crushed to dust in a seed bed. The use of this cultivator, after planting, compared with sharp pointed shovels has proved the means of furnishing a much larger yield of corn, for the reason that none of the plant roots is disturbed, which causes better development of the grain. The cultivator is of lighter draft and can be managed more easily by even a boy than many other styles of implements claiming favor. To know more about "Towers' System of Surface Culture," which gives larger dividends to the land owner and pays the rent for the tenant, the reader should write to the above address a postal card for their free literature.

Chris Smith came pretty near sweeping the platter clean in the classes where he had entries at the State Corn Show at Columbia. His ten ears of Johnson County White corn not only won in their class, but were the grand champion ears of the entire show. On these ten ears Mr. Smith won a hand-power water system, valued at \$75, and the Missouri State Board of agriculture corn cup, one of the handsomest trophies ever awarded at a state or national show, and valued at \$200. Mr. Smith will hold this cup one year, when it will again be contested for. But the ten ears were not all that Mr. Smith won on. He exhibited an ear of Johnson County White corn, which was made the grand champion single ear of the show. The premium on this ear was a Hayes' 4-wheel corn planter, valued at \$45. Then, as if all this were not enough, Mr. Smith won \$15, second premium for acre yield on South Missouri upland. His yield was 88 bushels and 15 pounds.—Bunceton Eagle.

SOIL SURVEY OF CAPE GIRARDEAU COUNTY, MO.

The report of the soil survey of Cape Girardeau County, Missouri, made by experts from the Bureau of Soils and the University of Missouri, has been issued by Secretary Wilson. The county is located in the southeastern part of the State and contains 574 square miles. Fifteen different types of soils were encountered during the survey, all of which were mapped and analyzed. The climate of the county is mild, the growing season extending about six months.

Grain growing and stock raising practically compose the agricultural products of the county, wheat being extensively exported, states the report. The live stock industry is becoming more important, and consequently an increase in the acreage of corn and grass is shown. All of the soils of the county are productive and adapted to general farm crops.

"Of chief concern is the management of the soils of the county," recommends the report, "is the maintenance of the supply of organic matter, which can be done most easily by a more extensive use of clover and cowpeas. More attention should also be given to crop rotation and use of barnyard manure. On the upland erosion should be guarded against by proper cultural methods. In the lowlands drainage must be provided before the rich soils can be utilized for farm crops."

The report eulogizes on the conditions of the county in this way: "The soil, physical features, and climate of the county are not excelled in any part of southeast Missouri, and the agricultural practices are the most improved kind. The farming class is universally prosperous."

"Money, after all, means nothing but trouble."

"Still, it is the only kind of trouble which is hard to borrow."

Home Circle

Written for THE RURAL WORLD.
A CRY FROM THE SOUL.

By Mrs. M. H. Menaugh.

Come to us, Lord! the night is long
and dreary;
All day, my feet the bitter wine-
press trod.
And darkness finds me sad and weary,
Come loving Savior! gracious son
of God!

Come to us, Lord! devoid of all Thy
glory;
Simple and plain as when by Galilee.
Come best-beloved! and list unto the
story
Of mingled love and tears I'll whisper
Thee.

Come to us, Lord! O leave Thy starry
splendor;
Let me, Savior, lean upon Thy
breast.
Sob out my woes upon Thy heart so
tender.
Come, best-beloved; bringing peace
and rest.

Come to us, Lord! O! the crowded
city.
Hath much of anguish, and hath
much of sin.
Come, Jesus, sweet, in love, and pity
And hardened hearts will ope and
let Thee in.

Come to us, Lord! and breathe a
blessing:
Haste to the dingy court—the dusty
street.
Neglected babes would know Thy fond
caressing
And repentant woman would anoint
Thy feet!

Come to us, Lord! behold the heart
is wailing;
Come to us, Master, if only for a
space!
Alas! Beloved: we must pass beyond
the veiling.
Ere we shall hear Thy voice, or
look upon Thy face!

Written for THE RURAL WORLD.
A TEXT FOR MANY A SERMON.

By Eliza.

"What do you think of it?" by Helen
Watts McVey, in January 16th issue
of RURAL WORLD, is a text for many
a sermon. Many of us farm women
have been thinking along this line for
some time, without courage to "speak
out in meeting" until called upon by
some old "standby" of the Home Circle.

This progressive movement can not
be born and developed to maturity
in any community without a reasonable
amount of care and forethought

New Beauty in One Week

BEAUTIOLA.

Ladies everywhere, are
learning the great value of
Beautiola, the Remedy that
Removes Brown Spots and
Freckles, modifies Wrinkles,
Scars and Small Pox
Pittings, and aids in permanent
curing Pimples,
Black Heads and all Facial
blemishes.

Price, 50 cts. per box,
postpaid.
We Want Live, Alert Women in Every
Town and City to Represent Us.

We offer pleasant and honorable employment
of high-class and permanent
nature, and one that is unusually profitable.

If you are seeking to better your
financial condition or want health giving,
outdoor work, under the blue
skies, and escape the drudgery of constant
ill-paying work in uncongenial
surroundings, or help out with the
big expense at home, engage in a clean,
congenial, legitimate, profitable permanent
business, whole or part of the
time.

Send us a Money order for \$5.00 and
we will send you \$10.00 of the popular
Beautiola Toilet Products—GUAR-
ANTEED—TRADE-MARKED U. S.
PATENT OFFICE. Act today.

This is the opportunity you have
been looking and praying for. Address
THE BEAUTIOLA CO., BEAUTIOLA
BUILDING, Dept. R., St. Louis, Mo.



even then many little disappointments
will attend it.

Every community needs this pro-
gressive movement. It needs the as-
sistance of each one, to make a suc-
cess of it. It is easier for the men
to get away to these meetings. Wife
and mother has so many little chores
to attend to, and hard to get the little
ones all ready! Right here we should
commence the progressive movement.
Our hearts may be thoroughly with
the work, but it takes our presence
to lend force to our good wishes, so
just insist that these progressive men
lend a helping hand, then we will all
go together to those meetings which
prove so much of a help and inspira-
tion.

Being a farm woman, mother of a
hearty half dozen, often not strong
myself, I fully appreciate the effort it
takes, to shake off the old ways, but
it can be done—it has been done, with
no desire to fall back into the old
ruts.

Sisters, read that article over again!
We are apt to become that machine.
It is easier to drift, for some of us—
others have false modesty as regards
these new departures, some of us
have so trained our conscience, that
it would not allow us to leave for an
hour's pleasure as long as a soiled
or unpatched garment or an un-
scrubbed floor remained! If this is
your predicament, it is time you were
joining this progressive movement.

If for no other reason than dollars
and cents, you should mingle with pro-
gressiveness in all lines, that you may
know better how to manage your
affairs towards profit, by being able to
accomplish more by improved meth-
ods: by learning to feed and clothe
your family along economical, sane
and scientific lines; thus developing
them morally and physically, and
avoiding much illness. Just think!
Often more thought and care is given
to the feeding of the farm stock than
is given to the members of the house-
hold.

Read that article again. Nothing
is ever gained without some effort, and
there are many ways in which we can
manage to get out a part of the time
to enjoy these public meetings. A
trial will convince you, if you are as
much in earnest as the American
mother of the present day should be.

Written for THE RURAL WORLD
ECONOMIZING ON TIME.

By Harriett Marshall.

The old saying, "A stitch in time
saves nine," might be transposed to
read, "A step in time saves nine,"
especially on these cold wintry morn-
ings which are in vogue in this vicini-
ty. Taking the subject in a literal
sense, I refer to the habit of making
provision over night for the exigencies
of the next morning.

This forethought might not be con-
sidered of so much importance in the
rural districts, but in the city, where
oftentimes, every minute counts, it is
a very serious matter indeed.

What called forth this article, was
a conversation with a newly married
couple, who were starting housekeep-
ing for themselves. Since the occupa-
tion of the husband demanded that
he should arise early in order to be
at his place of business on time, we
were curious to know what arrange-
ments and time savers were made be-
forehand.

It developed that practically no prepa-
rations were made whatever. The
husband rose to the merry tinkling
of an alarm clock, and hastened below
to make the fire in the kitchen stove.
As there was no kindling in the house,
he would have to "hike" down to the
shed after some, and bring up a bucket
of coal at the same time. The kitchen
fire started, he would then hurry off
to the grocery store around the corner
to get provisions for breakfast while
the wife made the coffee.

Naturally, we asked why they did

not bank the fires at night, as it
would save a great deal of time and
energy, as well as keeping off that un-
comfortable chill which one experi-
ences on getting up in a cold house.

But he said, oh it took only a few
minutes to do these things, and that
he was tired at night, and felt more
like reading and resting when he
came home. Of course, his arrange-
ment is all right so long as the alarm
clock is heeded, but if by any chance,
he should turn over to take an extra
wink of sleep or two, there might
be a different story to tell.

In such an event, it would be far
better to come down stairs, and find
the bacon in the pan ready to heat,
the bread cut in slices, waiting to be
toasted, and a nice bed of coals in
the cook stove. All this could be done
over night, in the space of ten or
fifteen minutes, and would help to
eliminate the "grouch" that sometimes
predominates over the tardy riser.

This shiftless custom seems to be
handed down from one generation to
another. The father and mother lived
in this way, and when the sons and
daughters went to homes of their own,
they continued the same practice so to
speak, of living from hand to mouth.

These are the people who seldom get
ahead in the world. Generally speak-
ing, if they are not long-headed enough
to economize in the use of time, it can
be taken for granted they will not
save much in the way of money
either.

USEFUL RECIPES.

To Cook Young Chickens — Dress
and joint them as usual, place in a drip-
ping pan and just cover with sweet
milk. Season with a little salt, pepper
and a little butter and set in the oven
to cook. By the time the milk is al-
most cooked away the chicken will
be done. They are splendid done in
this way.

Egg Pancake—For six persons use
six eggs; beat until light and add two
tablespoons of rich milk, salt and
pepper to taste. Fry six slices of
bacon crisp, drain nearly all the fat
off, then set on the fire and pour the
egg mixture over the bacon; cook
until eggs are set, being careful to
not let it burn.

Sponge Cake—The yolks of four
eggs, one cup of sugar, one cup of
flour; mix eggs and sugar thoroughly,
then add four tablespoons of cold
water, two tablespoons of baking
powder, two teaspoons of vanilla.
Beat the eggs separately, then add the
other ingredients and bake twenty
minutes in a hot oven.

Potatoes Duchesse—Boil and pass
through sieve six fine potatoes, add
one gill of cream, the yolks of three
eggs, pepper, salt, a little chopped
parsley, a hint of nutmeg. The mix-
ture must be smooth and well mixed.
Take a tablespoon measure at a time,
form into balls, place in a buttered
pan; set them in the oven until nicely
browned.

Chow Chow—One-half bushel green
tomatoes, four large onions, four large
green peppers, four large red peppers.
Run these through the food chopper,
add one large teacup of salt and leave
it set over night. Next morning put
on stove one-half gallon of vinegar,
put in one teacup of white mustard
seed, one quart of white sugar, four
teaspoonful each of cinnamon, cloves,
a little black pepper and some horse-
radish. After it comes to a boil put in
tomatoes after squeezing dry and boil
20 minutes.

Wash dried fruits carefully and soak
several hours in cold water before
cooking, that the fruit may absorb as
much water as it contained juice be-
fore being cooked.

Written for THE RURAL WORLD.
THE RURAL ROAD.

(Tune Annie Laurie)

It fills our souls with rapture,
To sing our little ode,
For how sweet, ah sweet, the mem'ries
Of the old "Rural Road."
Where nature reigns supreme,
And hath her charms bestow'd.
Ah, surely, there's none more lovely,
Than the old "Rural Road."

How well we now remember,
Where many times we rode,
'Mid the perfume of the flowers,
Along the "Rural Road."
There sweet birds love to sing,
And there make their abode;
For "fair nature" smiles her sweetest,
Upon the "Rural Road."

ALBERT E. VASSAR.

Written for THE RURAL WORLD.
REMINISCENCES.

By Agricola.

The old life in the past, the middle-
aged in the present, and the young in
the future.

As the older boys have been telling
of bygone days, we thought a few
memories of one who is not quite
three score may be of some interest.

Our earliest recollections are of the
war of '61, as seen in Northeast Ken-
tucky. As we were on the border,
there was no serious fighting in our
region, but frequent skirmishes be-
tween small parties.

The noted John Morgan used to
make frequent trips to do a little
trading with us. If some of his
horses were a little jaded, he pro-
posed to trade with the first fellow
he met on a good horse. The fellow
usually traded on Morgan's terms,
which were an even "swap."

One day a neighbor came galloping
by and shouted "Morgan's coming,
better hide your horses." Father sent
us boys to the woods with all the
horses but old Nell. He said that
Morgan would know that we must
have horses, so he would take the
oldest one and go on plowing corn;
but when another came by and said:
"They're coming," father said he
would rather lose any horse on the
farm than old Nell, so he unhitched
and went to the woods.

Sometimes it did no good to hide
them. If Morgan had reason to be-
lieve that he was missing valuable
horses he would say, "Produce those
horses, or I'll burn your house."

Then Mr. Morgan used to do a little
business with the banks, drawing
heavily on the cash without even the
formality of writing a check, and did
not seem to care that his account was
overdrawn. After one of his dashes
into our town, a small posse of zealous
citizens armed with whatever could
be found, started after him.

To my father, who was a Lieutenant
in the Mexican War, it was quite
amusing to see a dozen half-armed,
untrained, poorly mounted citizens
start after a hundred of the best
mounted, best trained soldiers in the
war. Our posse was lucky enough
not to come up with the enemy.

Another memory is of the teaming
of those days.

There was no railroad near and all
freight was hauled to the Ohio and
merchandise back into the county.
We boast of our draft horses of today,
but the empty wagon of '60 on the
turnpike of the South would make
a load for a pair of them. Most of
the wagons weighed 4,000 pounds, or
more. Of course they used four and
six horses, driven with one line. The
usual load for a six-horse team was
twenty-five barrels of whiskey, or 250
bushels of wheat, or about 1,500
pounds.

It was an interesting sight, even
to a boy like me, to see six big fel-

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Get it today in usual liquid form or chocolate tablets called **Sarsatabs**.

lows get down together to start such a load on a hill.

I intended to tell of how we took our boys, horses and mules to market, but space forbids this time.

In a subsequent article or in our notes we may say something of these things.

Written for THE RURAL WORLD.
GEMS OF THOUGHT.

By Jacob Faith.

Train a child right; as the twig is bent, so the tree will grow. Teach and cultivate good thoughts, good habits; seldom that they part from the way they have been taught from childhood. For example, political over half the sons will vote like their father. When no man could be found to lead the battle against the liquor traffic, a woman volunteered and carried on the fight. Prohibition twenty years ago was laughed at. Temperance teaching next to preaching the gospel. I believe the mother can do more teaching temperance than the father legislation. Tobacco, next evil to intoxicating drinks. So far, I am about alone writing of the abstinence of the tobacco evil. We should pray for the editor. They are both teachers and preachers. Their audience is larger than that can be reached by any human voice.

The non-tobacco user is exempt from paying the tobacco bill, the biggest tax; for the user, money is worse than thrown away. Young man, had I language and influence to persuade you to quit the use of tobacco in future years, you would thank me when my body is in the grave. The devil can get one just as easy from under a \$10,000 monument as from a ten cent slab. I believe an honest man can't play cards for money or take money for which he gave no value. If people who talk scandal were brought face to face with those parties, the evil would soon die. It's natural for parents to love their children, but often children do not their parents. The world is getting better by the improved machinery to make a living from the soil, but people are not. Had we the old time honesty and religion, I would like to have a new lease of life. When I get sick I comfort myself to meet companion, mother, father, and many others who live a Christian life.

SLICED POTATO TO BAKE WITH PORK.

Dig out the eyes and slice thinly enough to nearly fill a two-quart earthen dish, season freely with salt and pepper over top, then pour over sweet milk, two-thirds full which will carry salt and pepper. Cut five or six slices and lay over the top as a covering. Bake about two hours. If the pork is likely to get too brown, cover with thick brown paper until potatoes are done.

The style of looping back curtains is almost extinct. Curtains should be hung straight.

Roast meats and game require the most intense heat in order to sear the surface at once and retain the juices.

Written for THE RURAL WORLD.
THE OLD VIOLIN.

By Essilyn Dale Nichols.

A small violin in a pawn shop lay
Its case was shabby and old;
When an old blind man begged leave
to play,
For the sake of a little gold.

"I'll give you half my earnings," he
said,

To the shop man who blandly
sneers.

Then drawing the bow across the
strings,

Sings a song of by-gone years.

I am sad today—Once I was gay,
With a sweetheart who loved me
true.

I left her here with never a tear,
As a man without hope will do.

Just a whispered word was all I heard,
But enough to break my heart.

A woman's wile and a traitor's smile
Wrenched two fair lives apart.

Reverses came, and with them shame.
At last in a prison cell

I served a term; I'd time to learn
The lessons of life too well.

I prayed for death, but God gives
breath

To those who oblivion crave.
I wait the end without a friend

To weep above my grave.

The music ceased with a crash—a
moan;

An old string snapped in twain;
The old man stood so sad and lone

With a face of ghastly pain—
Clasping closer the violin:

"Just a few more notes," he said.
Then a sweeter strain—a german

hymn,
Calling the weary—the lost from

sin;
Like the master's voice from the vio-

lin,
Then stopped—the man was dead.

Written for the RURAL WORLD.
BILL BAILEY AT CHICAGO.

By Robert Lee Campbell.

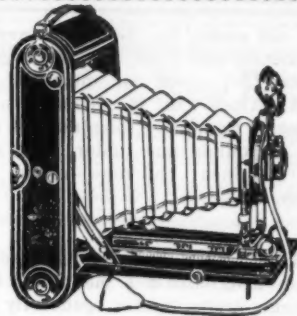
Habit is the cable that binds us to our destinies. Thus Bill Bailey had not fully recovered from the fatigue of his trip to Philadelphia when he sought his books and took up the subject of flowers. And he became so absorbed in this subject that for a time he almost lost his desire for travel. For the flowers of the field surely do form the connecting link between the living man and the lifeless earth. They bloom without pride and fade without regret; they live without anxiety and die without pain; they sway in graceful lines before the caresses of the wind and yet are contented to stand rooted to one spot of land. Bill Bailey was beginning to think that he, too, could be contented to spend the remainder of his life upon the little farm that lay hidden away in the beautiful little mountain valley. For he could agree with the poet:

"Be it ever so humble, there's no place like home."

But to travel had been Bill's desire for so long that this desire had been woven into a habit. And so when he read one day of "The Garden City of the West," this old desire for travel returned with such force that his resolve was shattered to pieces. He learned that the true name of this city was Chicago, and that the city was noted for its beautiful private gardens; that here could be seen,

Roses blooming in the morning light,
Wet with dew, so pure and bright:
Violets blushing quite unseen,
Hid among the grass so green.

Yes, Bill must see Chicago. There is the home of the great mail-order houses he had patronized in the past. What a great sight these enormous buildings must be! But at the thought



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of his past experiences in traveling a cold chill ran over him. Could it be that the wonders and beauties of Chicago were mere fancies, or were they real? Were those gardens vegetable or flower gardens? He at last decided that they must be flower gardens. For by common consent among all people flowers in general are chosen to express the desires of the human heart. They shade the fountain with its cool refreshing water; they crown the hero who comes from the blood-stained field of war; they are entwined into garlands that are borne by messengers of peace. They add lustre to the costly mansion of the rich and lend cheer and beauty to the cottage of the poor. They shed forth their perfume in the chamber of the sick and suffering and bestow the last benediction on the silent face of the dead. Sure it must be flower gardens that gave Chicago the name of "The Garden City of the West." Bill could almost see

lilies shining in dresses white,
And daisies, too. What a pretty
sigh!
And buttercups yellow, primroses
dear,
And gay daffodils bringing up the
rear.

How he longed to be at Chicago and still he feared to go. He thirsted for the wonders of travel and feared the ghost of disappointment. Finally he picked up a paper one day and read the following lines:

"Be still sad heart and cease re-
pining;
Behind the clouds the sun is shin-
ing:
Thy fate is the common fate of
all,
Into each life some rain must
fall."

This little verse decided the matter. The die was cast and Bill Bailey would go to Chicago. And once decided he was not long in starting, and soon stepped off the train at a very portentous depot and thus found himself in Chicago. He was bewildered. The beautiful gardens he had expected to see had vanished and their places had been taken by lofty buildings. They were wonderful to behold. It is true that he had seen some large and lofty buildings at New Orleans and Philadelphia but still they did not compare with the architecture of Chicago. But he must move on, and still where should he go? He could hear nothing but the honk, honk of the automobile and he was afraid to undertake to cross the path of those death-dealing machines. At last he decided to hire a cab and go to the great mail order stores. Here the courteous clerks took great delight in showing him through the various departments of these enormous stores. Bill was enraptured and was beginning to think that Chicago must be a paradise itself.

The day being spent Bill sought a hotel where he might spend the night and find food to refresh his waning strength. The hostelry was found and this too eclipsed anything in this line he had ever before seen.

Bill had not seen a single flower and such society he had never heard of before. And thus he decided that the

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sobriquet applied to Chicago was an even worse misnomer than that applied to Philadelphia. He remembered and repeated the lines from Byron:

"Society is now one polished
horde,
Formed of two mighty tribes—
the bores and bored."

And so he wended his way to the depot where he boarded the first train out of the city and sought the quietude of his little country home where he was destined to spend weeks in pondering over the scenes he had witnessed.

STOCKING LAUNDERING.

Home laundered stockings look best and wear longest. Each color must be washed separately. All new stockings should be soaked for half an hour in cold water before their first washing. Then put them in a small tub of hot water in which some good white soap is dissolved, squeeze, and soak them in the hot water, without rubbing, first on one side, then on the other. Rinse thoroughly in cold water and dry in the open air.

SALT THE UNIVERSAL STAIN REMOVER.

Salt might certainly be called the universal stain remover, for there are few accidents of any kind, especially on linen, in which its use, either alone or in conjunction with something else, is not successful. In some stains salt constitutes the whole or part of the recognized remedy, while for others it may advantageously be employed in default of a better.

Thus ink stains on carpets, colored tablecloth or colored stuffs in general, if immediately covered with salt, can generally be extracted without much difficulty.

Fresh fruit, iodine, tea, coffee or ink stains on linen should at once be spread with relays of dry salt, and as soon as possible, boiling water should be poured through the fabric, held over a basin.

Iron mold and mildew marks on linen should be treated with salt and lemon juice, or if very bad, with paste made from two tablespoonsful each of soft soap and powdered starch, one tablespoonful of salt and the juice of a lemon.

WEEKLY MARKET REPORT

Cattle Firm—Hogs Lower—Sheep Decline—General Review of Markets.

CATTLE—Steers made up a goodly part of the killers and a good demand caused a brisk trade, with prices on a steady basis. No choice beefs were included, as the quality ran to the medium grade. A drove of good-weight, fair-grade steers, at \$7.90, was the best sale, and a range of \$7.50 to this price moved the big end of the run. Killers took many light-weight steers and paid steady prices. Most of this class averaged close to 1000 pounds and sold from \$7 @7.20. There were a few bunches of the thin-flesh, light weights that sold to the killers from \$6.60 @6.65.

Good kind of heifers predominated and the trade ruled strong to a dime higher. A drove of good-quality steers and heifers mixed sold at \$7. Good fresh heifers of the proper weight sold at \$6.60 and \$6.85, with some of the pretty good kind at \$6.50 and \$6.35. Medium heifers sold at a range of \$5.25 @6.00.

Cows with flesh and good weight were in good demand and sold active at strong prices. The medium to good fair-weight kind also got a good call and changed hands at steady prices. A few of the best kind sold at \$7 and \$7.25. The bulk changed hands at a range of \$5.50 @6.50. The canner trade was steady.

Only a few loads of stockers and feeders were offered, and, on account of the light supply, prices were steady to strong. There was some demand from killers for light-weight steers and this also tended to strengthen values. Some feeders with good weight changed hands at \$6.50 @6.85, and some of the medium weight kind sold around the \$6 mark. Good-quality stockers sold as high as \$6.25, with a range from \$5.50 up catching this class.

There was a fair run of steers from quarantine territory and, with a good demand prevailing, the market ruled active on a steady basis. A good-sized string of Oklahoma steers that averaged 862 pounds sold at \$6.55, and several loads of light-weight steers from Mississippi cleared around the \$5 mark. Texas contributed a generous run of fat bulls and there was some complaint from the salesmen regarding this class. Opinion differed. One bunch was quoted steady with last week, but later transactions were called 10c lower.

Poultry, Butter and Eggs.

EGGS—In fair movement, but steady in price. New-laid, including cases, 21½c; in good secondhand cases 21¼c, and cases returned, 21c. Held and poorer offerings from 15c to 18c.

BUTTER—Packing stock (country make, packed and roll) sells readily but was lower in price. Nothing doing in tub stock aside from supplying the regular local consumption, and unchanged. Current make: Creamery—Extra, 33c; first, 28c; seconds, 26c; ladle-packed, 22c. Country store packed and roll (packing stock) at 18½c, with choice fresh roll nicely handled and wrapped in cloth more.

LIVE POULTRY—Fowls were advanced ¼c per pound, owing to scant offerings, coupled with a good shipping demand. Chickens firm, being in light offering and ready sale; while broilers and ducks were scarcer and firmer than ever. Only a few turkeys on market, but the demand for them was limited, too. Poor geese about the only dull article on the list—the choice geese being in demand. Turkeys—Choice dressing, 18c; small and poor, 11c. Fowls, 12c; chickens, 12c; staggy young roosters, 9c; broilers,

16c; old cocks, 7c. Geese—Fancy fat, 12 pounds and over, 13c; average receipts, 11c; poor or plucked, 10c. Ducks—Good run, 16c; poor or plucked less. Capons—7 pounds and over, 18c; 6 pounds and under, 15c; slips, 14c. Guinea chickens—round, per dozen, \$2.75.

Provisions.

Strong with prices advanced on steam lard, loose d. s. meats and light-average green bellies, generally firm otherwise and cash demand good.

PORK, f. o. b.—Standard mess in a jobbing way nominally at \$19.25.

LARD—Prime steam nominally 10c to 10.10c f. o. b. at close. Kettlerendered at 10½c in tierces.

GREEN MEATS—Hams—10@12-average 13@13½c, 12@14-average 12¾@12¾c, 14@16-average 12¾c; 18@20-average 12¾c; skinned hams, 12½@13½c; bellies—heavy to medium 10¾@11½c, 6@8-average 14¼c, 8@10-average 14c, 10@12-average 13c, 12@14-average 13¼c; picnics, 9@9¼c; pork loins, 12@12½c for light and 11@11½c for heavy; lean butts, 10½@11c.

S. P. MEATS—Hams—10@12-average 13@13½c, 12@14-average 12¾c, 18@20-average 12¾@13¼c; skinned hams, 12c to 13½c; shoulders, 9½@9¾c; picnics, 8½@9¼c; clear bellies, 12c to 13¼c.

Vegetables.

POTATOES—Values about steady on average receipts; offerings liberal, but buyers indifferent and demand limited to fancy dusty rural. Car lots Northern sacked, on track: Rural at 49c to 51c; Burbank at 48 to 50c, fancy dusty rural and russet burbank command a premium on foregoing prices, while frosted, rough, mixed or inferior sells at a discount on quotations.

ONIONS—Red onions in large offering, dull and weak; best bids tendered for extra fancy were 37@38c per bushel delivered, while holders asked 42@43c; dealers generally well supplied and demand light. Fair to extra fancy sacked red globe at 30c to 37@40c delivered; sacked white at 70c delivered.

BEETS—New Orleans at 25c and Kenner at 20c per dozen bunches. Old home-grown at 25@35c per bushel box loose.

CABBAGE—Old cabbage in large and excessive supply and dull. Car new Louisiana arrived—refused for freight. Bulk New York Danish and Wisconsin Holland seed at \$7 to \$9 per ton delivered. On orders dealers charge 75c per 100 pounds in sacks. Red cabbage dull at \$8 per ton delivered.

CARROTS—Sacked Eastern at 40c per 100 pounds and Northern bulk at 90c per barrel delivered. New Orleans at 10@12½c per dozen bunches. Home-grown at 35@40c per bushel box.

Country Produce.

GRASS SEEDS (Per 100 Pounds)—Offerings are fair in volume, but mostly of inferior to only medium grades. Demand good for clean, bright, sound seed of all varieties, at outside quotations or more, but market quiet otherwise. Millet—Common or white at \$1.15 to \$1.20, German at \$1.25 to \$1.30, mixed down to \$1@1.05. Timothy, \$3.25 for fair, to \$3.50 for good. Clover, \$6 to \$12 for weedy, up to \$18@19 for clean. Redtop at \$8@9 for recleaned, inferior, trashy, etc., less. Sales: Clover—One sack each at \$5, \$11, \$14.50 and \$16; 5 sacks at \$17.50, 2 sacks at \$17.25, 5 sacks at \$18.25; timothy—24 sacks at \$2.85.

SORGHUM CANE SEED—Sale, 1 car at \$1.16 per 100 pounds.

SUNFLOWER SEED—At \$2.75 to \$3.25 per 100 pounds.

STOCK PEAS—Range from \$1.60 to \$1.95 per bushel.

Cattle

WHEN YOU COME TO WEAN THE CALF.

Calves are getting so they are worth while nowadays, and it behooves us to make them the best quality that their breeding will permit of doing.

They have been living on the fat of the land during the past three or four months. Have you ever noticed a fine big calf just after he has finished a meal off his mother's milk, standing there, his legs spread wide apart, his tongue sticking out of his mouth about an inch, his face all covered with milk? If he isn't the picture of perfect contentment, where would you go to find contentment? And, too, he has had other good things. Perhaps he had learned to take a nip of the juicy rye and crimson clover before the herd went on the regular summer pasture. Then there were the lespedeza, the Bernauda, the redtop, the white clover, orchard grass, and bluegrass; all those luscious Southern pasture plants that Bill has been keeping in touch with all summer.

But now it is weaning time, and all is changed. Bill hasn't learned hardship but he learns it now; for the herd is brought to the barn lot, Bill, with his mates, goes into a dry lot, where not a blade of grass can be found. Perhaps there is a tub of water off in one corner of the lot. That is a thing of terror to poor Bill. This, and a rack in which are a few armfuls of shucks is what Bill has come to after his summer of luscious green things. He stands around in a half stupor—thinking perhaps that this turn is only a dream—until night closes down. All at once is heard a faint lowing from the back pasture. Bill—mute until now—comes to a realization of what he has been deprived of and his terror-sticken, outraged calfhood enters protest in a heart-broken answering call that is repeated all the night through. Morning finds him gaunt, his face the picture of despair, not much such a calf as when he stood contemplating the meal he had just finished in the pasture. Of course, he will recover from this strenuous weaning ordeal and start growing again after a month or two, if given abundant dry feed of good quality, but he will never make the fine animal he would have made, had his weaning and feeding been handled a little differently, and his final cost per pound will be actually greater than it would have been had his early good living been kept up until in his year-old form he could go on grass again.

Milk is a wonderful feed for young animals of all kinds, and when they arrive at the age where it is necessary to substitute other more solid foods, the change should be most gradual. I know well that it requires time to fool with calves, but not such a great amount of time, after all, when figured in hours and minutes.

We are preparing to wean some young stuff at this time, and I have ascertained by the watch that only 15 minutes per day is required to bring the calves and their dams from the near-by pasture, cut the calves out very quietly and turn them into the box stall, where the shelled corn, shipstuf, cottonseed meal and soy bean hay is awaiting them. They are handled in this way for about two weeks, until they all have formed the grain-eating habit. Then, they are turned with their mothers only long enough for them to extract their warm lunch twice per day, and after a week of this only once per day for a week. Their grain appetite has by this time about mastered their milk appetite, and there is seldom little protest when the cows are driven as far from the barn as possible, and the calves know

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their mothers, as such, no more forever.

Instead of the dry lot the calves have the rye and crimson clover on the early sown field, and this, with their grain, and clover or soy hay, keeps them safely, and growing right along. This is the condition that must prevail if the animal is to make its greatest and cheapest development. The writer knows five-year-old cattle weighing 800 pounds that have cost, in starvation returns, three times as much to grow them as it would have cost to have made the same weight at 13 to 14 months of age. And, too, they are worth at least one cent per pound less on the market than 14-months-old cattle of the same weight would bring.

When he is growing is the time to train the boy and the colt, and to grow the calf.—A. L. French.

HORNLESS CATTLE.

Significant progress has been made during the past ten years in establishing polled types of horned breeds of cattle. Polled Durhams, Polled Herefords and Polled Jerseys represent the most notable achievements in this line of breeding. Beginning with "sports" or naturally hornless animals, the polled character has been fixed in these three types to an extent which insures its reproduction in an overwhelming majority of matings. Polled blood has become so potent that, although obtained through "sports" from breeds with horns, its polling efficiency is thoroughly dependable, even in cases where the elimination of horns is met with stubborn inherent opposition.

A strong and growing demand for polled types of horned breeds is expressing itself in the operations of farmers, feeders and breeders. Those who take the purely practical view of horns, considering them useless and expensive physically to remove, welcome the hornless types as satisfactory substitutes.

Polled bulls have been put to work in many horned herds, and hornless females of the same breeding are aiding them in fixing the polled character. On the whole, the movement which seeks gradually to dehorn the races of horned cattle is of growing strength and popularity.—Breeder's Gazette.

You might sell or trade your house, farm or anything else you have by running a small ad at 1 cent a word in our classified column.

The young couple had taken a house in the suburbs of Boston for the summer and they were besieged with company.

The men were enjoying the cool of the evening on the piazza when one of the party remarked to his host:

"Do you know, Fred, there's something the matter with your front gate? It took all my strength to open it. It needs oiling or shaving or something."

"Neither one, old man, it's all right. Every one who comes through that gate pumps two buckets of water into the tank up there on the hill."

The Dairy

THE PRODUCING QUALITIES OF JERSEYS.

Editor RURAL WORLD: Many of your readers are familiar with the work the Sophie's Tormenter family of Jerseys are doing, but few of them realize the inherent producing qualities of this family.

During 1912, forty-eight cows finished yearly authenticated records. These cows ranged in age from one year and eleven months to eight years and four months at commencement of test. Their average age was three years and three months. The forty-eight cows made 386,925 lbs. milk, 24,891 lbs. 14 oz. butter; average 8,060 lbs. 15 oz. milk, 518 lbs. 11 oz. butter.

A yearling produced 8,502 lbs. 4 oz. milk, 513 lbs. 5 oz. butter. A two-year old 14,160 lbs. 5 oz. milk, 736 lbs. 15 oz. butter. A three-year-old 11,736 lbs. 9 oz. milk, 813 lbs. 12 oz. butter. A four-year-old 11,413 lbs. 13 oz. milk, 781 lbs. 2 oz. butter. A five-year-old 15,280 lbs. milk, 1,047 lbs. 8 oz. butter. A six-year-old 15,347 lbs. 4 oz. milk, 1,110 lbs. 7 oz. butter. An eight-year-old 13,083 lbs. 9 oz. milk, 816 lbs. 5 oz. butter.

This family has made many more very large records in the hands of other breeders.

Several of the above cows travelled to the International Dairy Show, where they assisted in winning for us premier breeder award.

That this family combines beauty with utility was shown by our winning over two hundred premiums at eight of the largest fairs, in the strongest competition, as well as premier breeders' award at the Waterloo Show, said by breeders and exhibitors to be the best show of Jerseys ever held in this country.

That breeders realize the superior quality of this family is evident by the demand for bulls of this breeding.

We sold bulls to twenty-two states and Canada, not including bulls sold at Waterloo auction, the largest number going to any state, being four, these to New York, which may account somewhat for New York leading in dairy products, New York dairymen and breeders realizing the importance of superior dairy blood, without which no county or state can make any advancement in the production of dairy products.

J. E. D.

HOLSTEIN-FRIESIAN COWS.

During the period from December 24th, 1912, to January 3rd, 1913, records for 200 cows were received and have been accepted for entry in the Holstein-Friesian Advanced Register; twenty-four of which were begun not less than eight months after the freshening of the cows making them, and sixty-five of which were semi-official yearly or lactation records. Of the 111 ordinary records reported, seven were extended to fourteen days and four to thirty days.

This herd of 111 animals of which nearly one-half were heifers with first or second calves, produced in seven consecutive days 46,251.1 lbs. of milk, containing 1,578.947 lbs. of butter-fat; thus showing an average of 3.41 per cent fat. The average production for each animal was 416.7 lbs. milk containing 14.225 lbs. of butter fat; equivalent to 59.53 lbs. or 28.35 quarts of milk per day, and 16.59 lbs. of the best commercial butter per week. These averages are computed from tests as carefully and accurately made as it is possible to make them; and some wonder why breeders of pure bred cattle go to the trouble and expense that is necessary in the making of records. Breeders make the records to show that in their cows they have

the goods, and that they are able to furnish reliable stock for improvement.

The mission of an improved dairy breed is to increase the productive capacity of the dairy herds of the country. This may be accomplished directly by using pure bred cows in whole or in part for milk production, and indirectly by grading up the common herds to greater production by the use of pure bred bulls. To conserve purity of blood, pedigree registers are used for the improved breeds; no animal being eligible to registration whose sire and dam are not recorded. Advanced Registry rests wholly upon merit; the animal must prove itself worthy before it can be accepted. All advanced registry animals were first entered in the pedigree register to guarantee purity of blood, and then advanced to a higher register upon proving that they were worthy of such advancement. Cows are admitted to advanced registration on their own performance; bulls, on the performance of their daughters. The test record to the cow is what the track record is to the horse; provided the test record is well authenticated.

MANAGEMENT OF THE DAIRY HERD.

The future herd of a given farmer depends entirely upon his ability to raise good calves, and for this reason the raising of calves becomes a most important part of the dairy business. As a rule the farmer cannot afford to feed whole milk to the calves for any length of time, but they should get the whole milk for at least the first ten days; skim milk is then substituted, but the substitution should be made gradually, say at the rate of a pint at each feed. After skim milk has been substituted begin to feed flax seed meal, either mixed with the milk in a raw state, or else mixed with it after having previously been cooked into gruel with water. The former method is preferable, for the reason that, especially in the summer time, or in the early spring, there is danger of the gruel souring, in which case, it is sure to produce scours and there is no special advantage derived from cooking the flax seed meal, as it does not become more digestible.

Another important factor that should not be overlooked is the feeding of roughage to the calves. They should be fed all the clover hay they can eat. Keep the calf growing but never allow it to become fat. This is where many make a mistake. They over-do the feeding, and get the calf into the habit of laying on flesh, which is to the detriment of their future dairy qualities. The heifers should be bred so as to calve by the time they are from two years to twenty-seven months old. They ought not to be more than two years and five months old at first calving, because if allowed to run too long before they are bred, they are prone to get in the habit of laying on flesh. Heifers should be forced to give as large a yield of milk during their first lactation period, as possible.

To this end they should be milked for at least ten months, regardless of the amount of milk they give. When a heifer is not as fully developed as might be desired, it is a good plan not to breed her the second time, until from four to five months after calving. This will afford her an opportunity of allowing her to go dry about three months before calving the second time, and still she may be milked for fully ten months. In the meantime she will gather strength and nearly reach her full development, which will place her in better condition for the good second year's work. Always keep

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in mind that the helper is really to be trained for the dairy during the first two years' work, and upon this training will largely depend her future value as a dairy producer. The farmer must largely be guided in his feeding operations by what he raises on his farm. The rule that should be observed, however, is to raise crops that he can produce economically, and if he has to purchase foods, the price of the different products as compared with their protein content should be his guide. Dairy cows should be well sheltered in winter. They must be kept comfortable, and should never be unduly excited. It is a poor plan to allow well bred dairy cows to drink water at a temperature of 32 degrees F. and even colder during the winter months. As a rule dairy cows do not get water more than once a day; consequently when they go to water in the morning they will drink anywhere from 60 to 70 lbs.; or from 7 to 8 gallons, all of which has to be heated to 102 deg. F., the normal body temperature of the cow. This necessarily means the combustion of a large amount of feed. Besides, cold water gives a shock to the sensitive system that is not calculated to benefit milk production.—W. R. Gilbert.

SOIL SURVEY OF MILLER COUNTY, MO.

The field work of the Soil Survey of Miller County, Missouri, made by experts of the Bureau of Soils, U. S. Department of Agriculture, in co-operation with the University of Missouri Agricultural Experiment Station, has been completed and the report will be issued during the latter part of the coming summer. The County contains about 597 square miles, or 382,080 acres.

The survey was made by the Bureau of Soils in order that the agricultural value of the soils of the County might be determined and show to what crops each type is best adapted, in order that the Department may recommend what agricultural methods should be practiced to obtain the best possible yields, and, at the same time, maintain or increase the present fertility of the soil.

A soil and topographic map will accompany the report, showing in colors, the location and extent of the various types of soil encountered during the survey, as well as the location of all farm houses, churches, schools, public roads, streams, and railroads in the County.

SOIL SURVEY OF CARROLL COUNTY, MO.

The field work of the Soil Survey of Carroll County, Missouri, made by experts of the Bureau of Soils, U. S. Department of Agriculture, in co-operation with the University of Missouri Agricultural Experiment Station, has been completed and the report will be issued during the latter part of the coming summer. The County contains about 686 square miles, or 439,040 acres.

The survey was made by the Bureau of Soils in order that the agricultural value of the soils of the county might be determined and show to what crops each type is best adapted, in order that the Department may recommend what agricultural methods should be practiced to obtain the best possible yields, and, at the same

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A Swift Current, Saskatchewan farmer writes:—"I came here on my homestead, March, 1906, with about \$1000 worth of horses and machinery, and just \$85 in cash. Today I have 200 acres of wheat, 200 acres of oats, and 50 acres of flax." Not bad for six years, but only an instance of what may be done in Western Canada, in Manitoba, Saskatchewan or Alberta.

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time, maintain or increase the present fertility of the soil.

A soil and topographic map will accompany the report, showing in colors, the location and extent of the various types of soils encountered during the survey, as well as the location of all farm houses, churches, schools, public roads, streams, and railroads in the County.

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Our Slogan: "Farmers Must Be Co-operators"

WHO IS BENEFITED?

Editor RURAL WORLD: Geo. F. Baker is chairman of the Board of Directors of the First National Bank of New York City and intimate personal business associate of J. Pierpont Morgan. He told the House investigating committee that since the organization of that bank with a capital of \$500,000, it had made more than eighty-millions of dollars profits.

This is a fair sample of what is going on in our business world from one end of the country to the other. Enormous fortunes have been amassed in our land simply because the people support the Profit System.

The New York World says: "National banks are chartered by the United States government. They have powers and privileges that are denied to all other banks. Among these powers is that of issuing money, which is an attribute of sovereignty itself."

"Congress could this very day repeal the act under which these banks were created and send every one of them into liquidation. It could by a single law destroy all those privileges under which the First National Bank, for example, has made eighty million dollars in profits on an original investment of \$500,000."

The Equity Union is not asking for an equal division of wealth in the United States. We do not want the thrifty people to share their prosperity with shiftless hobos and tramps. We do not believe in condemning men who accumulate wealth by industry and economy. We believe this class deserves commendation instead of condemnation.

But we are radically opposed to our government granting special privileges to any class which enables them to rob the masses. This has been going on till the combination of the privileged few now has absolute control of our money system and of very large per cent of our industries.

This power can only be wrested from the combinations by the people. The people must be organized into industrial unions and educated to be fraternal cooperators.

A union, with a strong organizing force behind it, which carries on with more and more power, a campaign of organization and education, and which continually promotes the intelligence, morality and fraternalism of its members will finally make the people masters of the situation in politics and business.

Responsibility.

The people are sovereign in America. They have the Divine Right to rule. Upon them rests the responsibility for good government and of "equal rights to all and special privileges to none," not only in politics but in business. Under the present system in vogue in our country the millionaires are the masters and the people subservient vassals.

The capitalistic class seek more and more power and wealth through combinations of the few to the sorrow of the many.

The people must unite and break down the power of these unholy oligarches by golden rule cooperation.

The Farmers' Equity Union is be-

ginning a demonstration in eight states of a practical plan of cooperation that will educate the farmers and other wealth producers away from capitalism, from the profit-system and from the big dividend idea. This plan of cooperation makes the people their own capitalists, destroys the profit system and makes big dividends on capital invested impossible. Five per cent is the highest rate that capital can ever command in an Equity Exchange. No profit whatever is allowed in a true Equity Exchange for handling produce or merchandise. Big dividends are out of the question as every Board of Directors is prohibited from declaring over 5 per cent dividends on the stock subscribed.

The justice of true cooperation appeals to the people and they are rallying around the Equity Union banner as fast as they understand our plan and principles.

The National Union is young, but as strong in good principles as Gibraltar, and as sure to win as the triumph of right is certain.

The profit system gives its benefits to the few unworthy. Cooperation benefits the many worthy ones.

Big dividends on capital enables a few parasites to filch the wealth produced by the millions of laboring people. Cooperation blesses the common people. It brings them near together, makes them friendly, and gives them power over every enemy. The farmer who refuses to be a cooperator stands in his own light and hinders one of the best causes ever started in America. We want from one to three hundred cooperators united at every good market. They must have from ten to thirty thousand dollars capital. These Exchanges must buy coal, twine, fencing, fence posts, fertilizer, flour, feed and farm machinery together. They must buy and sell together on a National scale. The campaign of organization and education must be kept going winter and summer.

Our entire business system must be changed gradually, but surely, until the wealth-producers and their real helpers are masters in the economic world, instead of selfish millionaires whose greed grows stronger and stronger as we heap millions into their unholy coffers.

We want every person to have equal rights in politics and equal opportunity in business. This will come through industrial unions which teach and demonstrate golden rule cooperation. It will encourage every worker and bring peace and prosperity to our ninety million people.

Send ten 2-cent stamps for the Equity text book which gives full information on how to organize and carry out the Equity plan of cooperation.

Greenville, Ill. C. O. DRAYTON.

THE UNORGANIZED FARMER HAS IT EASY.

Editor RURAL WORLD: The farmer of the past has tried to farm without thinking, and if he could he called it easy. If he wanted a wagon or binder or any farm implement he just called in town and had the business man get prices from the traveling man (for the business man was half farm-

er), so he had to ask the traveling man the price on farm implements.

Seven million farmers having other people see to the matter of getting their tools made O, so easy!

Seven million farmers to make wagons for. Do you wonder the wagon factory should be paid well for attending to so much of your business?

Do you wonder at the large packing houses asking so much for doing the butchering for seven million farmers?

Do you wonder at these wide-awake men forming the Harvester Trust when they had all your tools to make?

The unorganized farmer has it easy—nothing to think about, very much, only let the other fellow do all these things for him.

This plan worked very well as long as the farmer could get a farm from Uncle Sam or from "pa," who got it from Uncle Sam.

But, alas! things have changed. Uncle Sam has got out of land to give away and Pa has too many children to give all a big farm, so now how the farmer can pay for so many things is his problem. He is getting where he can't quite buy high-priced land and buy high-priced wagons, binders, plows, harrows, drills, etc. He can't hardly afford to pay so much for butchering, he also feels as though he should do more of his own storing of produce rather than pay so much to the other fellow for doing it. The farmer has to make a living on less land and he must now begin to think.

Every farm cannot have a wagon factory, a slaughter pen, an elevator, a mill, etc.

The unorganized farmer says this "not thinking" is getting so it isn't so easy, we have to pay so dear for letting the other fellow do it all for us.

So the unorganized farmer sees how the organized farmer does by making large contracts for wagons, coal, twine, and all farm tools and machinery and he sees the great amount saved.

He sees by linking himself with other farmers they become a great power and in a position to do the things they alone have had to have done for them.

He sees how easy 1,000 farmers can run a coal mine or how much cheaper they can contract their coal than he alone can do.

He begins to understand the difference between retail and wholesale. And as he begins to think he soon finds it pays to think and really gets more real happiness from his thinking than he did by his oldtime plodding and grumbling and kicking.

"The unorganized farmer has it easy," for the other fellow.

If you are not a member of Farmers' Equity Union, why are you not a member?

Equity means happiness.

How happy man becomes when he finds the true way to do things.

Three cheers for Equity.

Everybody send in a good word for Equity. We like to hear good things about good things.

Equity people want to see everybody win honestly, and want to write a line or more to COLMAN'S RURAL WORLD to help them win by showing and telling how they won.

Send in a line for the paper, we all want to hear from you; if you do once you will want to again.

Don't do like I do, write them too long.

It might be well for some one to drop a line suggesting shorter pieces so as to give more Equity people room.

I would like to see some little pieces from the Equity boys and girls; for Equity is being built for you and you want to prepare yourselves to carry Equity on to greater things.

We all should be thankful for what Equity has done and is able to do. All

EUGENE W. STAFF,

CONSULTING ELECTRICAL ENGINEER
Designer and Installer of Storage Battery,
Electric Light and Power Plants for the
City and Farm.
402 LACLEDE BLDG., ST. LOUIS, MO.

we want is more Equity people for Equity.

When we get in line with Equity we are in a position to do things right and get the rewards of our labor, which every man must have to be as happy as God intended him to be.

I say, three cheers for Equity!

V. I. WIRT.

Viriden, Ill.

EQUITY UNION RALLIES BY THE NATIONAL PRESIDENT.

Feb. 1, 1:30 p. m., Hugoton, Kans.
Feb. 4, 1:30 p. m., Kinsley, Kans.
Feb. 5, 1:30 p. m., Cimarron, Kans.
Feb. 8, 1:30 p. m., Hugoton, Kans.
Feb. 12, 10 a. m., Wellsford, Kans.;
1:30 p. m., Haviland, Kans.
Feb. 13, 1:30 p. m., Mullinsville, Kans.
Feb. 14, 1:30 p. m., Minneola, Kans.
Feb. 15, 1:30 p. m., Fowler, Kans.
Feb. 17, 1:30 p. m., Meade, Kans.
Feb. 18, 1:30 p. m., Plains, Kans.
Feb. 19, 1:30 p. m., Liberal, Kans.
Feb. 20, 1:30 p. m., Tyrone, Okla.
Feb. 21, 1:30 p. m., Hooker, Okla.
Feb. 22, 1:30 p. m., Guymon, Okla.

Every member at these places is expected to see that the notice of the meeting is given in all the country schools only a few days before the date. We cannot afford to neglect these rallies which are held for the purpose of instilling the principles of the Equity Union into the minds and hearts of the people.

Enthusiasm is a wonderful force. Our President is full of it, and he inspires others with the same power. The people must be made to understand the difference between Golden Rule cooperation and the profit system which makes the rich richer and the poor poorer. The President ought to be an expert on this subject as he lectures on it every day. We depend on the members for a big rally at every one of these towns. If the crowd is there you can expect a rousing meeting, the enrollment of new members, an increase in the number of stockholders in the Exchange, and new hope and life in the mind and heart of every member.

Postal Card Shower.

If every member will write ten postal cards to farmers they know, and urge them to come, giving them the correct date of the meeting, we will have a fine crowd every day and make sure of fifteen new Equity Exchanges in western Kansas this year.

NATIONAL UNION OF THE FARMERS' EQUITY UNION.

WARNING TO NORTH DAKOTA MEMBERS.

It was reported to our National Vice President that one Fred Mott, from Carson, N. D., claims to have an official appointment as an auditor for all Equity Exchanges in North Dakota from the National Board of the Equity Union. We wish to state that no such appointment has been made and we warn all of our Equity Exchanges against this man Mott as one who has bitterly fought the Equity Union at Carson, Heil and Elgin. He has very little influence with reading, thinking farmers, but he has done what he could to tear down the Equity Union from the start, and therefore no Equity Exchange should employ him.

NATIONAL UNION.

When you receive a marked copy of your favorite paper you will be reminded that you must renew. It will cost you only 50 cents, and be the best investment you could make.

HOW SWAMP AND MARSH SOILS MAY BE MADE MOST PRODUCTIVE.

Editor RURAL WORLD: A large acreage of swamp and marsh lands is yearly reclaimed by drainage, some being in extensive tracts, but considerable is in detached proportions, composing ponds, sloughs and draws, which before draining were considered waste places, and were a menace to the health of the community. These lowland soils have some valuable properties, but because of their lack of potash have proved disappointing as crop producers to farmers who do not understand their real nature, and who assume that because such soils are dark in color they must be rich in fertility.

This is a rule that holds good in upland soils, those of a brown or black color, being the most productive, but in these the various elements of plant food are pretty evenly distributed. This is not true of marsh soils, which are for the most part composed of organic matter consisting of decaying and decayed leaves, stalks and fibrous roots of plants, containing, when perfectly decomposed, a large supply of nitrogen, but a very small potash content, not enough to furnish the needed material for even one large crop.

It must not be supposed, however, that all drained lands are alike in character, and consequent productiveness. The swamps covered with dense forests, when cleared and cultivated, are satisfactory crop producers for a longer period than are grassy marshes and yield better from the first. This is accounted for by the fact that the leaves that form the greater part of the organic matter in the former, decay more rapidly than the fibrous roots of which the latter is mostly composed, hence the supply of plant food that is yearly made available is greater.

The decay of this fibrous matter can be greatly hastened by the application of stable manure, which by its fermentation breaks up the coarse soil particles and liberates the plant food they contain. This is especially true of horse manure, as it decomposes very rapidly and also contains a large percentage of potash. Some owners of marsh soils have been so successful for a few years with this method, that they have erroneously concluded that their success would last indefinitely, but a little thought should convince them that as the nitrogen in the soil becomes available, there will not be enough potash in the manure to balance that element as the manure itself contains a large supply of nitrogen.

The excess of nitrogen will of course partly leach away, but it is poor farm practice to permit the most costly element of plant food to go to waste, when it could be easily prevented by applying potash in sufficient quantity to balance the nitrogen. The Illinois Experiment Station after making repeated tests to determine the needs of different peat and marsh soils within that State, in a published bulletin setting forth the results gives the opinion that it is very poor farming to be stingy in the application of potash as on ordinary soils this element is not lost by leaching, loose sand or gravel being the soils on which any loss occurs.

It is somewhat of a waste to apply manure to swamp soil in order to keep up the supply of potash, as the potash in a ton of manure is worth only about from forty to fifty cents, and if the other elements in the manure are not needed, they are wasted, when they might be of great value on other parts of the farm. This is clear, when we remember that 200 pounds of muriate of potash is the application

most favored for profitable results and that this amount contains as much potash as ten tons of manure, which should be worth many times what the muriate costs, if we take into account the nitrogen it contains, and for which there may be little or no use.

D. C. C.

ACID SOIL.

What is meant by acid soil?

How may an acid soil be determined?

What kind of soils are most likely to be acid?

What causes acid soils?

What is the remedy for acid soils? Do fertilizers tend to make soils acid?

What is the relation of soil acidity to crop production?

These and similar questions are frequently asked concerning the matter of acidity.

There is no short concise definition for an acid soil. These soils usually lack proper drainage, natural or artificial. Often they are low in organic matter and are late warming up in spring. They are compact, difficult to put in shape for seed and to cultivate. Neither clover nor alfalfa will grow to do any good on such soils, and maximum or even medium crops are seldom produced on them. Crops are slow to come up, and then slow to get a start, and later turn yellow on these soils. They lack thrift and a healthy appearance throughout and are usually very patchy. Acid or sour soils may be said to be poisonous to most plants, since plants grown on them are stunted, weak, and sickly. Moist acid soils turn blue litmus paper red. This is often used as a test for "soil acidity." An acid condition of a soil means that the lime supply is low or that the acid factor is high. Quite often in the case of poorly drained land, the establishing of a proper drainage corrects an acid condition.

The best way to determine whether or not a soil is acid, is by applying something to it which will correct an acid condition. Lime will do this, and finely ground limestone is the best and cheapest form to use. Lay off a small plot of the soil to be tested and then apply ground limestone to it at the rate of three to six thousand pounds per acre and work it into the soil. Now divide this plot into two or three parts and try growing corn, oats and alfalfa on these smaller plots. Lay off another similar plot of the untreated ground adjoining and try growing the same crops. If the soil is acid, crops on the limed plots will be much stronger, more vigorous and healthy than those on the untreated plots. This contrast may not be so striking the first season but it will show up the second season, if the soil is properly drained. Often soils which are thought to be acid simply lack organic matter to lighten them up and give them proper aeration and drainage.

Acids are constantly being formed in the soil. The decay of all organic matter produces acid. Rain water and air carries carbonic acid into the soil but these acids are desirable. They aid in making the non-available plant food of the soil available to plants. They liberate both phosphoric acid and potash for plant consumption. Considerable quantities of acids result from the fermentation and decay of green and barnyard manures, and much of the value of these manures lies in the action of these acids on the non-available plant food of soils. Now, if the soil has proper drainage any excess acid formed in this way may be carried away and thus eventual acidity prevented. But if the soil is poorly drained these



ELGAS, 601 Pine Street, THE OPTICIAN.

Begin the New Year With a Pair of Glasses

That will enable you to see prosperity ahead with clearness and accuracy. I am the man that can do this for you.

LOOK! LISTEN!

Here is a Bargain! 120 acres; good buildings, fruit, 80 acres cultivation, clover and timothy. In sight of depot, county seat, creamery, canning factory; half mile fine river front, summer resort and farm, fine view, good timber, rich soil, some bottom land; six cows, four horses and all other stock and farm tools; feed to last until grass; eight acres rye. All go for \$5,000. Speak quick if you want a bargain. Old age; no help. C. F. Stephens, Galena, Mo.

Money Wanted on Real Estate

Owing to financial reverses in other business enterprises, I am compelled to raise a considerable sum of money on my three farms or sell them outright, which I very much dislike to do. I would consider a partnership with an agreeable party having sufficient ready cash to relieve my pressing obligations. My three farms consist of 700 acres, with 300 cleared land, all level and very productive. I am a live stock fancier and would appreciate a partner of like inclinations or a loan from such a one. L. G. CROWLEY, Black Jack, Ark.

Electric Lights Like City Folks Use

FOR 25¢ A MONTH.
(4 lights, 4 hours per day)
Cost nothing if you use ordinary farm engine a few hours a week. Lights in barn, too. Safe—clean—convenient. Plants, including standard Chloride Accumulator, \$135 up, without engine. Install now and enjoy the long winter evenings as never before. Special offer on first plant in each county. For free estimate and literature, write or see H. J. WOBUS, Electrical Engineer, 915 Locust St., St. Louis, Mo. Electric and Water Systems. Water Wheels and Rams.

crops, etc. If there is any truth in this latter science, so called astronomy will defend and prove it, and whatever absurdity therein lies astronomy will explode it.

The study of the heavens has engaged the attention of mankind from the remotest ages. The ancient Egyptians, Chaldeans, Assyrians and Babylonians were steadfast star gazers and built up the mythical science of astrology, the cradle of astronomy. Their work was highly imaginative, legendary and drifted to fortune-telling. However, their observations were of great value to men in later ages and paved the way for the development of modern astronomy.

GEORGE KAVANAGH.

OUR LIBERAL CLUBBING OFFERS.

To secure new or renewal subscriptions for COLMAN'S RURAL WORLD we offer you choice of the following combinations for \$1.00, as advertised:

- Course of Lessons on Real Estate and RURAL WORLD one year, \$1.00
- McCall's Fashion Magazine and RURAL WORLD one year, \$1.00
- Fruit Grower and Guide Book and RURAL WORLD one year, \$1.00
- Government Land Book (Official) 132 p. and RURAL WORLD one year, \$1.00
- Twice-a-Week Globe-Democrat and RURAL WORLD one year, \$1.00
- Twice-a-Week Republic and Farm Progress and RURAL WORLD one year, \$1.00
- Woman's World (Magazine) and RURAL WORLD one year, \$1.00
- American Magazine with RURAL WORLD, both one year for \$1.75
- Farm and Home and RURAL WORLD, one year each, \$1.00
- Rust-Proof, Antiseptic Oil-Pad Razor and RURAL WORLD one year, \$1.00

We will renew your subscription and send the paper for one year to a friend or neighbor for \$1.00.

COLMAN'S RURAL WORLD, 821 Holland Bldg., St. Louis.

EVENING SHADE.

Editor RURAL WORLD: I have just read Mr. Miller's masterful paper on the wonderful Saturnian System in a late issue of the RURAL WORLD.

No doubt some farmers may think astronomical articles are out of place in a farm journal, for what has astronomy to do with agriculture?

In this letter I shall endeavor to show that there is a connection between astronomy and agriculture; that the two sciences may be more allied and interrelated than most of us imagine.

All farmers are interested in the changing seasons. They say if it is seasonable we will get good crops. Early and late springs and autumns, hot and cool summers, cold and mild winters, wet and dry years are matters of vital interest. Now the seasonal changes occurring during the year are the result of causes interpreted and explained by astronomical science.

What is meant by the Vernal Equinox? This is an astronomical term, but if you understand it you know when and why winter ends and spring begins. What is the Autumnal Equinox and why does the season change at this time from late summer to early autumn? What is the Summer Solstice? Winter Solstice? Colure of the Equinoxes? Colure of the Solstices? Is the sun the same distance from the earth the year round? Is its heat and light constant? What is the Ecliptic? What is the cause of eclipses? What is a waxing moon? Waning moon? When is the moon in third quarter? What is the difference between a gibbous and crescent phase of the moon? What is phase? Is there any such thing meant by "harvest moon?" When and why does it occur? And finally, Mr. Farmer: Have you ever seen a perfectly full moon in your life? Astronomy answers all this and much more.

Much of our agricultural prosperity depends on meteorological or weather conditions is based on astronomic law. Our best long range weather forecasters of modern times are astronomers of no small erudition. Read the weather forecasts found in many almanacs of today and you will find such allusions as "Mercury Perturbation," "Venus Equinox," "Jupiter Period," "Saturn," "Influence," "Mars Attraction," and so on, showing that the scientist bases his weather calculations on astronomical data.

Then there is "Moonology," telling of lunar influences on plants and animals, on planting and harvesting of

RURAL WORLD WANT COLUMN.

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For each insertion.

4 LINES 4 TIMES, \$1.

No ad accepted for less than 25 cents

GOVERNMENT FARMS FREE.—Our 1912 official 132 page book, "Free Government Land," describes every acre in every county in the United States; it contains township and section plats, Maps, Tables, and Charts, showing inches rainfall annually, elevation above sea level by counties. The New Three Year Homestead Law approved June 6th, 1912, the 320-acre Homestead, Desert, Timber and Stone, Coal, Pre-emption, Scrip, Mining and other government land laws. Tells how and where to get government land without living on it. Application blanks, United States Patent. All about Government Irrigation Projects and map showing location of each. Real Estate Tax Laws of each state, area in square miles, capital and population and other valuable information. Price 50 cents postpaid. Address COLMAN'S RURAL WORLD. This valuable book will be sent with new or renewal subscription to RURAL WORLD for \$1.00.

SWEET CLOVER.—Mammoth variety, both white and yellow. Best land improving hay and grazing plant known. Write Mrs. J. T. Mardis, Falmouth, Ky.

SWEET CLOVER SEED.—Cultivated biennial varieties, white and yellow for winter sowing. Prices and circulars how to grow it on request. Bokhara Seed Co., Box D., Falmouth, Ky.

"RATS AND MICE QUICKLY EXTERMINATED."

No cats, poisons or traps needed. Learn the secret and keep them away forever. Sure, yet perfectly harmless except to rodents. Secret originally cost \$100, but we will send it postpaid for only 25c.

The above advertisement has appeared in many magazines. I will send you the genuine receipt for this RAT AND MICE Exterminator (which I know to be O. K.) and 20 fine assorted postcards for 12c. This is a Bargain. Address, Milton Ross, 4421 17th Ave., Rock Island, Illinois.

S. C. WHITE LEGHORNS.—Fine lot of lovely white cockerels. Quality high, prices low. Write Ernest Haynes, Prairie du Rocher, Illinois.

SINGLE COMB BLACK MINORCAS.—Heavy bone, stand-up cockerels, fine shape and color. Most all are sons of St. Louis, Kansas City and Missouri State Show prize winning hens. Quality and prices will both please you. Eggs in season for hatching. Let me know your wants. J. E. Haynes, Prairie du Rocher, Illinois.

THOROUGHbred WHITE ROCK cockerels and pullets for sale, also eggs in season. Write for prices. Mrs. R. L. Gholson, R. F. D. 2, Kevil, Ky.

ROSE COMB WHITE LEGHORN EGGS from standard-bred yearlings. Two dollars for fifteen, prepaid. Quantity rates. Field Bros., R. 2, Cape Girardeau, Mo.

CAREFULLY selected and properly dried pure "Golden Beauty" Seed Corn. This is an exceptionally fine golden yellow corn, ears from 9 to 12 inches long with small cob and large grain, indicating strong germ. Price, \$2.00 per bushel, tipped, shelled and graded. Sample sent by mail on request. Wm. C. Kriege, Edwardsville, Ill.

One Thousand Agents Wanted to sell a Self-heating Sad Iron. Fuel and labor saver. Pay salary or commission. Agents make \$15.00 to \$20.00 per day. Write Imperial Sad Iron Co., Memphis, Tenn., Box 90.

500 MEN 20 TO 40 YEARS OLD WANTED at once in every state for Electric Railway Motormen and Conductors; \$60 to \$100 a month; no experience necessary; fine opportunity; no strike; write immediately for application blank. Address Manager, W-260, Dwight Bldg., Kansas City, Missouri.

CALIFORNIA POSTALS.—Sample 1 cts. Pitman, 522 Chamber Commerce Bldg., Los Angeles.

FRIENDLY advice to sufferers; free; all chronic ailments. Dr. Allen, 4350 Taft Ave., St. Louis.

FINE LEAF TOBACCO for Sale. Two years old. Send stamps for free samples. W. L. Parks' Tobacco Co., Adams, Tenn.

IT'S USELESS, WITHOUT USEFUL, to try to get all poultry experiments and full report monthly of National Egg Laying Contest. A useful, practical, sensible poultry paper, six months' trial subscription for 10 cents. Send today. **USEFUL POULTRY JOURNAL**, Trenton, Mo.

POSITION WANTED as foreman or manager on farm; references given on request; married. Address Foreman, Rural World, St. Louis, Mo.

"FOUR BAY HORSES," and "Brother Andy," March and Two-step, will be mailed to you for 25 cents. This music delights young and old. Address: Mrs. Lloyd Ritter, R. R. 2, South Whitley, Ind.

COLUMBIA EQUITY EXCHANGE.

Columbia Local No. 26 of the F. E. U. meets Saturday, February 1st, at 10 a. m. in a forenoon and afternoon session. The question on corn culture will be discussed for part of the day's program. Other business of importance remains to be transacted and every member of the local is expected to be present and take an active part in the work. Be a cooperator. Yours truly,

LYMAN L. NOLT, Sec'y.

STICK TO THE PRINCIPLE OF RIGHT—YOU ARE BOUND TO WIN.

Editor RURAL WORLD: Don't you, brother farmer, wish that we could see ourselves as others see us? It seems strange that we human beings as we are, with the same faculties of thinking, seeing and knowing, should be so easily swayed by another mind. The plans of our Union are safe—just as safe as anything can be—but we have some minds that will do all in their power to try and make the weak mind fear that he is on dangerous ground. Why will they do this? The Equity Union plan puts every dollar that the laborer or farmer makes into the pockets of him who makes it. The farmer will eventually find that he has been deceived. Let us who know that our plans are safe, give to this class that have lived from our toil, give them all the rope they want. They will soon hang themselves. Let the man who joined the Equity Union because it has the right principles stick to the principle of right; let him who joined for personal gain go his length; he cannot fool all the people all the time. Our Union principles were good enough in the beginning, because they were founded on justice and right. The time will come, and it will not be long, when the scales will fall from the eyes of the people. Then and then only will the deceiver of humanity reap the whirlwind.

Farmers, let us have an old-fashioned fox hunt in our business. There are caverns located in every branch; search out the human fox and politely inform him that he will have to quit the job. The man in our rank who will sell rotten grain or put stones in a sack or filth and dirt in his fleeces of wool, is just as much of a fox as the man who will try to throttle justice and deceive the farmer in a business transaction. A commission man told me the other day how some farmers would put rotten potatoes in the center of a sack and sell them at top price, and he said that if we would organize so that we could clean out this style of deceitfulness we farmers who are honest would not have the suspicion cast upon us and be compelled to market as this rascal does. He said that the farmer who stood for honesty and organized for honesty was the only fellow who could make his business clean. If you are for clean business, join the Equity Union and stand for its principles. Elect a board of directors and elect those who will be loyal to the cause and will not be swayed; who will investigate and not take things for granted; instruct them to hire a competent manager, a manager who will work for all, and all work for him; a manager who will keep a safe margin and not try to break the company up so that the fox may get control.

Our movement is new and it is a union for all. This is what makes some halt. They have been used to specials. They look and act just like a horse when you raise an umbrella before him, but let him smell the umbrella and he will go ahead. Our union receives the benediction of nature. We are entering a more complete national life than the world has ever seen. It

is a wholesome, irresistible, natural progression from lower forms of industrial life to higher ones. It is a phase of economic evolution having its roots at the gates of Eden and controlled by laws as regular as those which mould the falling raindrop.

TOM LINE.

FACING A COAL MERGER.

Editor RURAL WORLD: A Mr. Peabody of Chicago is trying hard to form a coal merger through the soft coal belt of Illinois. If Mr. Peabody can control the supply, also the price, Equity will face the coal problem as it facing the implement trust.

Here is something to be settled, and we should put out wits together to settle aright.

The farmers of this section are thinking seriously of buying a coal mine on Equity plan so their Exchange will include the output of coal.

This coal is part of their own land and who has a better right to bring it to the top for sale? Now, the question arises, would the north and northwest like to take stock and get coal at cost of production?

It looks to me as Equity is getting large enough to operate several mines.

We have one or two mines that have made the offer to take equal stock with members if we saw fit to continue the same management. They then would be interested in dollars and cents themselves as to making the mine pay, of course the Equity plan giving the right to change management at any time. Which would be best, have manager who has equal stock or Equity own all and simply hire manager as they do at their elevators?

The coal mines' success would be like the Equity elevators—much would depend on management. He could do much better with organized patronage.

Will we as farmers sell our rights to the few and then be their slaves and hand down such heritage to our children? We cannot do this—we will not do this. We must honor our creator and show our worthiness of being called His children.

We must have our next winter's coal on a true golden-blue Equity plan.

May we ask God's help at all times. Virden, Ill. V. I. WIRT.

GROWING SWEET CLOVER.

Editor RURAL WORLD: I have been reading with considerable interest the discussions in your valuable paper in regard to sweet clover, and made what I consider an unsuccessful attempt to grow it. Last year I bought from Mrs. Mardis of Kentucky two different kinds of sweet clover and put it in as per her directions. A very small part of it grew from eight to ten inches high and what did come was confined to a very small corner of a two-acre lot. My failure to get a stand might have been caused by the extremely dry weather in the latter part of the season. Mr. Arnold and others speak of inoculation being absolutely necessary. This is something of which I am profoundly ignorant. What is inoculation? I will say, however, by way of explanation that I only farm by "proxy," which may be some excuse for my ignorance. I have a farm in the Ozarks, the larger part of the improved land is level, free of rocks and easy to cultivate, but some of the fields have had cane grown on them for forty and fifty years in succession, without any rotation or fertilizer. In addition to the farming land there is something like eight hundred acres good for pasture only, fenced and well watered. This is a great country for sheep and cattle. What I would like to have from more experienced farmers is the best method for handling a proposition of this

Rheumatism

A Home Cure Given by One Who Had It

In the spring of 1893 I was attacked by Muscular and Inflammatory Rheumatism. I suffered as only those who have it know, for over three years. I tried remedy after remedy, and doctor after doctor, but such relief as I received was only temporary. Finally, I found a remedy that cured me completely, and it has never returned. I have given it to a number who were terribly afflicted and even bedridden with Rheumatism, and it effected a cure in every case.

I want every sufferer from any form of rheumatic trouble to try this marvelous healing power. Don't send a cent; simply mail your name and address and I will send it free to try. If, after you have used it and it has proven itself to be that long-looked-for means of curing your Rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when positive relief is thus offered you free? Don't delay. Write today.

Mark H. Jackson, No. 558 Alhambra Bldg., Syracuse, N. Y.
Mr. Jackson is responsible. Above statement true.—Pub.

kind. In regard to recuperating badly worn soil, and would the use of lime be beneficial? C. E. WEEKS.

Cartersville, Mo.

SOIL SURVEY OF PEMISCOT COUNTY, MO.

The report of the Soil Survey of Pemiscot County, Missouri, made by the Bureau of Soils in cooperation with the University of Missouri, has been issued by the Department of Agriculture. The report contains thirty-two printed pages of matter dealing with the possibilities and agricultural development of the county, and is illustrated by a map in colors showing the locations of the different types of soils encountered during the survey, and, in fact, everything of agricultural interest in the county. The county contains 488 square miles of territory, and is located in the lowlands of the southeastern part of the State.

The report states that almost the entire county was once heavily timbered, and that at the present time is less than half cleared and under cultivation. The cost of clearing ranges from \$10 to \$18 an acre, and fair crops of corn are raised on the clearing the first year. Artificial drainage is necessary, drainage districts having been already organized and many miles of dredge ditches have been constructed. Three-fourths of the county at the present time has been provided with main ditches, and others are now in process of construction. Corn, cotton and alfalfa are the principal crops with good yields and good profits. There is a large room for improvement in the selection of varieties and in the cultivation and handling of crops, continues the report. Hay, grain and pasture crops should receive more attention. Cowpeas are grown in the corn, but the acreage should be extended both for the production of hay and seed.

Many parts of the county present ideal conditions for growing truck crops and berries. Land values are low with prices advancing, and transportation facilities are good and markets nearby.

In conclusion, the report states: "The agricultural needs of the county are better methods of farming, the use of a wider range of crops, the combination of stock raising with other farming, and a general improvement in buildings."

We respectfully call the attention of our readers who receive a marked copy of the paper that we have no desire to part company. It is just a reminder that you should renew, and can have the paper sent you another year for 50 cents. See our clubbing offers. Maybe you would like a combination.

To advertise is to keep abreast of the time. Try a small ad at 1 cent a word. It will pay.